

THE UNIVERSITY  
OF ILLINOIS  
LIBRARY

NOT TO BE  
TAKEN FROM THE

~~ARCHIVES~~

BUILDING



720.6 Royal Institutes  
RI of British Arch  
ser.3 Journal.  
v-64

11/17/77  
UNIVERSITY OF ILLINOIS LIBRARY

Name

Identification  
Number

Address

Mrs. Highsmith desk -

Binding DEC 15 1977

Binding DEC 21 1977

Lydia Spott

Photocopy

THE UNIVERSITY  
OF ILLINOIS  
LIBRARY

720.6  
RI  
3 v.33

ARCHITECTURAL  
LIBRARY

B



**NOTICE:** Return or renew all Library Materials! The *Minimum Fee* for each Lost Book is \$50.00.

The library from which it was withdrawn is responsible for it or before the **Latest Date** stamped below.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University. To renew call Telephone Center, 333-8400

UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

MAR 09 1991

FEB 23 1991

JUL 18 1995















THE ARCHITECTURAL JOURNAL  
BEING THE JOURNAL OF THE ROYAL  
INSTITUTE OF BRITISH ARCHITECTS

VOLUME XXXIII—THIRD SERIES







# JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

NOVEMBER 1925—OCTOBER 1926



VOLUME XXXIII—THIRD SERIES

LONDON : No. 9 CONDUIT ST., REGENT ST., W.1

1926







# Index to Volume XXXIII. Third Series

A. A. Pantomime, 25.  
Adams, W. A. Cole: The Condition of the Building Industry, 228.  
Adshhead, Professor S. D.: The Architect and his City, 46; The Preservation of Rural England [review], 444; International Federation for Town and Country Planning, 492; Mr. Neville Chamberlain on Housing, 515.

## ALLIED SOCIETIES—

ABERDEEN SOCIETY OF ARCHITECTS: Annual Report, 392.  
BERKS, BUCKS AND OXON ARCHITECTURAL ASSOCIATION: Annual Dinner, 261; Annual General Meeting, 394; [Berkshire Society of Architects] Annual Meeting, 392.  
BIRMINGHAM ARCHITECTURAL ASSOCIATION: Address by Robert Atkinson, 290; Presidential Badge, 320.  
BRISTOL SOCIETY OF ARCHITECTS: Address by Professor P. Abercrombie, 229.  
DEVON AND CORNWALL ARCHITECTURAL SOCIETY: Formation of Design Club at Exeter, 230; Annual Report, 392.  
HAMPSHIRE AND ISLE OF WIGHT ASSOCIATION OF ARCHITECTS: Annual Report, 393, 423.  
LEICESTER AND LEICESTERSHIRE SOCIETY OF ARCHITECTS: Annual Dinner, 230; Annual General Meeting, 420.  
LIVERPOOL ARCHITECTURAL SOCIETY: Syllabus of Sessional Meetings, 23; Mr. E. B. Kirby's Presidential Address, 58.  
MANCHESTER SOCIETY OF ARCHITECTS: Annual Dinner, 193.  
NATAL INSTITUTE OF ARCHITECTS: Annual General Meeting, 541.  
NEW SOUTH WALES, INSTITUTE OF ARCHITECTS OF: Election of Council, 395.  
NEW ZEALAND INSTITUTE OF ARCHITECTS: Election of President, 395.  
NORFOLK AND NORWICH ASSOCIATION OF ARCHITECTS: Annual Report, 261.  
NORTHERN ARCHITECTURAL ASSOCIATION: Mr. G. Reavell's Inaugural Address, 60; Annual Dinner, 230; [Tees-side Branch], 320; Smoking Concert, 393.  
NOTTINGHAM AND DERBY ARCHITECTURAL SOCIETY: Annual Dinner, 290.  
RHODESIAN INSTITUTE OF ARCHITECTS, 293.  
SCOTLAND, INCORPORATION OF ARCHITECTS IN: Annual Convention, 489.  
SHEFFIELD, SOUTH YORKSHIRE AND DISTRICT SOCIETY OF ARCHITECTS AND SURVEYORS: Annual Meeting, 420.  
SOUTH WALES INSTITUTE OF ARCHITECTS [CENTRAL BRANCH], 262; Annual Dinner, 393.  
TRANSVAAL ARCHITECTS, THE ASSO-

CIATION OF: Retiring President's Address, 519.

WESSEX SOCIETY OF ARCHITECTS: Annual Dinner, 23; Presidential Badge, 116.

YORK AND EAST YORKSHIRE ARCHITECTURAL SOCIETY: Annual Dinner, 319; Visit to Castle Howard, 541.

Allied Societies' Conferences: 151.

American Institute of Architects: 59th Convention, 263.

Ancient Lights and Easements, The Law of, 352.

Ancient Monuments and Remains, The Conservation of, 522.

Annual Dinner: H.R.H. Prince of Wales to be present, 574.

Annual Report of the Council, 359, 423; Board of Architectural Education, 364; Art Committee, 370; Literature Committee, 371; Practice Committee, 373; Science Committee, 376; Architects' and Builders' Consultation Board, 379; Competitions Committee, 380; London Building Acts Committee, 381; Town Planning and Housing Committee, 382; Registration Committee, 383; Auditors, 383; Finances, 384-388; Discussion at Annual Meeting: [William Woodward], 453; [H. P. Burke Downing], 454; [T. R. Milburn], 454; [Horace Cubitt], 455; [Gilbee Scott], 455; [H. C. Bradshaw], 455; [Percy L. Marks], 455; [Major Harry Barnes], 455; [Major H. C. Corlette], 457; [J. E. Franck], 457; [Arthur Keen], 457; Attendances at Council and Standing Committees, 423.

Ansell, W. H.: The Regulation of Architectural Competitions, 258; Co-operation of Architect and Craftsman, 409.

Archæological Congress in Palestine and Syria, Mr. Frank Moars appointed R.I.B.A. delegate, 152.

ARCHITECT AND CRAFTSMAN, CO-OPERATION OF [Gilbert Bayes], 403, 411; [Laurence Turner], 406, 411; [Irving K. Pond], 408; [Oswald P. Milne], 408; [C. F. A. Voysey], 408; [H. B. Creswell], 409; [Reginald Hallward], 409; [George Sheringham], 409; [E. Guy Dawber], 409, 410; [L. T. Buckley], 409; [W. H. Ansell], 409; [Darcy Braddell], 410; [Maurice E. Webb], 410; [H. M. Fletcher], 410.

ARCHITECT AND HIS CITY, THE [Dr. Raymond Unwin], 35, 50; [G. L. Pepler], 45; [The Dean of Canterbury], 46; [Professor S. D. Adshhead], 46; [Dr. I. G. Gibbon], 46; [Colonel C. H. Bressey], 47; [W. R. Davidge], 48; [Sir Richard Paget], 48; [Ebenezer Howard], 48; [Edward P. Warren], 49; [Gilbert H. Jenkins], 49; [Major H. C. Corlette], 50; [L. H. Knox], 50; [E. Guy Dawber], 50.

Architect and his Work, The, 62, 230;

[F. J. Cooke], 229; [W. H. Herbert Marten], 247.

Architect Freemasons, 420.

Architects and Direct Labour Work, 292, 294.

Architects and Housing Schemes, Qualified, 62.

Architects and Operatives, 545.

Architects and Surveyors, Association of: [Harry Barnes], 84; 116.

Architects' Benevolent Society, 25, 62, 88, 116, 152, 231, 262, 296, 396, 421; (Annual General Meeting), 460, 552, 582, 619.

Architects' Defence Union, 422, 492, 583.

Architects in Practice, Lectures for, 422.

Architects, Local Authorities and Qualified, 318.

Architects' Pupils, Education of, 422.

Architectural Education [Re-constitution of the Board of], 56, 61; Visiting Board, 61, 233; Facilities for Architectural Education, 117, 152; [Maurice E. Webb], 191; Appointment of Corresponding Members, 231; R.I.B.A. Maintenance Scholarship Scheme, 233, 521, 547; The International Congress on [The Earl of Crawford and Balcarres], 239; [Wm. Emerson], 351; 353; Grant from R.I.B.A., 423; Conference with Teachers of Building, 520, 547; Council Decisions, 544; Scholarships and Examinations, 547; R.I.B.A. Testimonies of Study, 548.

Architectural Schools, Diplomas of, 232.

Architecture Club [Dinner], 55; [Lansdowne House] [J.H.E.D.], 448.

Architecture for Working Men, Lectures on, 422.

Architecture from the Structural Point of View [Professor A. E. Richardson], 307.

Architecture, The Public Appreciation of [Editor of the *Morning Post*], 390.

Architecture, The Sociological Basis of [Stanley C. Ramsey], 12.

Arterial Roads of Greater London, The New [W. Harding Thompson], 145.

Art, What is Good and What is Bad in [Sir Reginald Blomfield], 255.

Arts and Crafts, Central School of [F. R. Hiorns], 490.

Ashley, H. V.: The Regulation of Architectural Competitions, 258.

Auctioneers' and Estate Agents' Institute [E. W. Blake], 52.

Baines, Sir Frank: The late Professor Maxwell Lefroy, 113.

Baker, Herbert, Knighthood conferred on, 518.

Bank of England, An Architectural History of the [H. Rooksby Steele], 499, 530, 562.



- Barnes, Major Harry : Registration, 20 ; Association of Architects and Surveyors, 84 ; The Condition of the Building Industry, 134 ; Annual Report, 455.
- Barnsley, the late Ernest [F. W. Troup], 289.
- Bartlett, Arthur : Modern Plasterwork Construction [review], 445.
- Bayes, Gilbert : CO-OPERATION OF ARCHITECT AND CRAFTSMAN, 403, 411.
- Begg, Jn. : The Late George Wittet, 618.
- Bell, Dr. R. Anning : Paris Exhibition of Decorative Art, 286.
- Benslyn, William T. : Everyday Life in Roman Britain [review], 81.
- Birstingl, H. J. : The Life and Work of Sir John Soane, 20.
- Blake, E. W. : Auctioneers' and Estate Agents' Institute, 52.
- Blomfield, Sir Reginald : Vote of thanks to President, 8 ; Letter on Sir Edwin Lutyens's Report on Waterloo Bridge, 54 ; What is Good and what is Bad in Art? 255 ; International Federation for Town and Country Planning, 492 ; appointed R.I.B.A. representative on Council of British School at Rome, 492 ; Raynham Hall, Norfolk, 527.
- Bodiam Castle [Nathaniel Lloyd], 442.
- Bolton, Sir Arthur T. : Sir John Vanbrugh, 338.
- Braddell, Darcy : Third Exhibition of the Architecture Club, 22 ; Co-operation of Architect and Craftsman, 410.
- Bradshaw, H. C. : Annual Report, 455.
- Bressey, Colonel C. H. : The Architect and his City, 47.
- Brice, A. H. M. : Scale of Charges, 517.
- Bridges of France, Old [Henry M. Fletcher], 340 ; [R. Langton Cole], 485 ; Exhibition of Water-colour Drawings [The Earl of Crawford and Balcarres], 412 ; [E. Guy Dawber], 413 ; [H. M. Fletcher], 413.
- Bridges, The Preservation of Old, 522.
- Briggs, Martin S. : Modern Building Practice [review], 449.
- Bristol Corporation Bill, 492.
- British School at Rome, The : Appeal for additional subscribers, 263.
- Broadcast Criticism [James Ransome], 616.
- Buckland, H. T., and International Federation for Town and Country Planning, 492.
- Buckley, L. T. : Co-operation of Architect and Craftsman, 409.
- Building Construction, Elements of Design in the Teaching of [Professor A. E. Richardson], 612.
- BUILDING INDUSTRY, THE CONDITION OF THE [Herbert A. Welch], 123, 140, 253 ; [Major Harry Barnes], 134 ; [W. H. Nicholls], 135 ; [R. Coppock], 136 ; [Henry Matthews], 138 ; [George Hicks], 138 ; [Fred Thorne], 138 ; [James Murrey], 139 ; [Maurice E. Webb], 139 ; [E. Guy Dawber], 139 ; [Henry A. Mackmin], 191 ; [James Ransome], 192 ; [R. Langton Cole], 192 ; [W. A. Cole Adams], 228 ; 232.
- Building Practice : Economics in, 492.
- Building Research, 232.
- Building Science Abstracts, 319, 520.
- Building Trade, Specialisation in the, 422.
- Building Trades Exhibition, The International, 319, 354, 461 ; [John E. Yerbury], 391.
- Building Trades Operatives, 422.
- Buildings, Regulations for Steel-framed, 458, 492.
- Buildings, The Cubing of, 294.
- Butler, A. S. G. : Prelude to Architecture [review], 81.
- Butler, C. McArthur : The History of the Society of Architects, 518.
- Bye-laws of the R.I.B.A., Amendments of the, 265.
- Cambridge School of Architecture, 61, 116.
- Canterbury, The Dean of : The Architect and his City, 45.
- Cart de Lafontaine, H. P. L. : Modern Tendencies in French Architecture, 67, 228 ; Franco-British Union of Architects, 421, 487.
- Cave, Walter : The Regulation of Architectural Competitions, 259.
- Chambers, Miss I. M. : Italian Gardens of the Renaissance [review], 451 ; Old Domestic Architecture of Holland [review], 539.
- Chiswick House, Visit to [Francis R. Taylor], 419.
- City Churches, The Safety of the [Arthur Keen], 389.
- Clark, Sir William H. : Paris Exhibition of Decorative Art, 284.
- Coker, Professor E. G. : Some Problems in the Construction of Buildings considered experimentally, 209, 248, 251.
- Cole, Lt.-Col. H. W. G. : PARIS EXHIBITION OF DECORATIVE ART, 271, 286.
- Cole, R. Langton : The Condition of the Building Industry, 192 ; Old Bridges, 485.
- Commissions, Secret, 32.
- Competition of Industrial Designs, Annual, 150.
- Competitions : Gosport, Proposed New School, 30, 62, 89, 118 ; Guisborough, Proposed New Hospital, 30, 63, 89, 119 ; Portstewart Golf Club, 30, 63 ; International Competition, 30, 63, 89, 119, 155 ; Cairo, Reconstruction of the Mosque of Amrou, 30, 63, 89, 119, 155, 200, 235, 266, 295, 323, 354, 399, 427, 463, 494, 523, 551, 584, 624 ; League of Nations : Conference Hall, 30, 63, 89, 119, 155, 200, 235, 266, 295, 323, 354, 399, 427, 463, 494, 523, 551, 583, 624 ; Buenos Aires, New Institute for the Blind, 31, 63, 89, 119 ; Liverpool College, Proposed New College Buildings, 31, 63, 89, 119, 155 ; Australian War Memorial—Canberra, 31, 63, 90, 119, 155, 200, 236, 266, 296, 324 ; Topsham Public Hall, 31, 63, 89, 119, 155, 199, 235, 266, 295, 323 ; Gabalfa, Proposed Branch Library, 63, 90, 119, 155 ; West Bromwich Permanent Building Society, 89, 119, 155, 199, 235, 266, 295, 323 ; Birkenhead New Art Gallery, 89, 119, 155, 199 ; Blackpool Memorial Clock Tower, 89, 118, 155, 199, 235 ; Newcastle Police and Fire Brigade, 118 ; Manchester Town Hall Extension, 118, 155, 199, 235, 266, 295, 323, 354, 399, 427, 463, 494, 523, 551, 584, 624 ; Newbridge : Proposed New Parish Church, 118, 155, 199, 235 ; Wisbech Town Hall, 154 ; Doncaster, Proposed Isolation Hospital, 266, 295, 323, 354, 399, 427, 551 ; Downham Market U.D.C. Housing Scheme, 266, 295, 323, 354, 399, 427 ; Cairo : Scheme for Building Large Residences, 266, 295, 323, 354, 399, 427, 463, 494, 523, 551, 584, 624 ; Chingford Council Offices, 296, 323, 355, 399 ; Australian National War Memorial at Villers Bretonneux, 296, 324, 355, 399, 427, 463, 495, 524 ; Purley, Council Offices and Fire Station, 323, 354, 399, 427, 463, 494 ; Scottish Legal Life Assurance Society, 324, 355, 399, 427, 463, 495, 524, 551 ; Warley, Proposed New Elementary Schools, 354, 399 ; Aberdeen Beach Improvement Scheme, 399, 427, 463, 494 ; Bromsgrove Rural District Housing Competition, 427, 463, 494, 523 ; Masonic Peace Memorial, 427 ; Leicester, Proposed Saffron Hill Cemetery, 463, 494 ; Liverpool : Cenotaph, 494, 523, 551, 584 ; Peny-Waun Site, Competition for Layout of Houses, 584, 624 ; Perth Academy, 623.
- Competitions : Assessors' Awards, 294.
- Competitions, Limited [John Hunt], 491 ; 492 ; [Report of Scrutineers], 523.
- Competitions, The Regulation of Architectural : Report of Eighth General Meeting [Sir Banister Fletcher], 256 ; [H. W. Wills], 256, 259 ; [H. D. Searles-Wood], 257 ; [W. J. H. Leverton], 257 ; [H. A. Welch], 257, 258, 259 ; [H. V. Ashley], 258 ; [G. H. Jenkins], 258 ; [Maurice E. Webb], 258 ; [E. Stanley Hall], 258 ; [W. H. Ansell], 258 ; [T. R. Milburn], 259 ; [Walter Cave], 259 ; [George Elkington], 259 ; [Arthur Keen], 259 ; [F. R. Taylor], 260 ; [C. F. Ward], 260 ; [W. F. C. Holden], 288, 316.
- Construction of Buildings considered experimentally, Some Problems in the : [E. G. Coker], 209, 248, 251 ; [W. E. Vernon Crompton], 249 ; [Dr. Oscar Faber], 249 ; [P. J. Waldram], 250 ; [E. Fiander Etchells], 251 ; [Arthur Keen], 251.
- Contents : 7 November, 32 ; 21 November, 33 ; 5 December, 65 ; 19 Decem-



- ber, 93; 9 January, 121; 23 January, 157; 6 February, 201; 20 February, 237; 6 March, 269; 20 March, 297; 10 April, 325; 24 April, 357; 8 and 22 May, 401; 12 June, 429; 26 June, 465; 17 July, 497; 17 August, 525; 18 September, 553; 16 October, 585.
- Cooke, F. J.: R.I.B.A. Forms of Contract, 192; The Architect and his Work, 229.
- Coppock, R.: The Condition of the Building Industry, 136.
- Corlette, Major H. C.: The Architect and his City, 50; Annual Report, 457.
- Cotman, John Sell [W. Hilton Nash], 483.
- Crang, Dr. D. H. S.; Lincoln Cathedral, 179.
- Crawford and Balcarres, The Earl of: The International Congress on Architectural Education [review], 239; Speech at opening of Exhibition of Water-colour Drawings of Old Bridges in France, 412; Evidence before the Royal Commission on Thames Bridges, 606.
- Creswell, H. B.: Co-operation of Architect and Craftsman, 409.
- Crickmer, Courtney M.: Scale of Charges, 517.
- Croce, Benedetto [W. E. Vernon Crompton], 72.
- Crompton, W. E. Vernon: Benedetto Croce, 72; Some Problems in the Construction of Buildings Considered Experimentally, 249; Specification [review], 417.
- Crow, Arthur: The Making, Prevention and Unmaking of a Slum, 336.
- Cubitt, Horace: Annual Report, 455.
- Daubney, C. A.: District Surveyors in London, 260.
- Davidge, W. R.: The Architect and his City, 48; elected President of Town Planning Institute, 519.
- Dawber, E. Guy: INAUGURAL ADDRESS, 1; Reply to vote of thanks, 9; Speech at Unveiling of Mr. Gotch's portrait, 9; Speech at presentation of R.I.B.A. Street Architecture Medal, 11. The Architect and his City, 50; The Condition of the Building Industry, 139; Waterloo Bridge, 144; Review of the Work submitted for the Prizes and Studentships, 189; ADDRESS TO STUDENTS, 203; elected honorary member of British Academy of Arts in Rome, 263; Paris Exhibition of Decorative Art, 286; Presented to King, 316; The Making, Prevention and Unmaking of a Slum, 337; Co-operation of Architect and Craftsman, 409, 411; Exhibition of Water-colour Drawings of Old Bridges in France, 413; The Works of Sir Thomas Graham Jackson, 478.
- Denning, C. F. W.: The late Lt.-Col. P. G. Fry, 115.
- Development of London and the Home Counties, The [H. V. Lanchester], 348.
- Devonshire House Buildings [Charles Marriott], 349.
- Dicksee, Sir Frank: Vote of thanks to President, 7; Vote of thanks to President, 207.
- District Surveyors in London [C. A. Daubney], 260.
- Downing, H. P. Burke: Annual Report, 454.
- Drysdale, George: The Late Leonard Aloysius Scott Stokes, 149.
- Duckworth, George H.: The Making, Prevention and Unmaking of a Slum, 327, 337.
- EASTON, J. MURRAY: Review of Books Illustrating Paris Exhibition of Decorative Art, 616.
- Edwards, F. E., appointed R.I.B.A. representative at Sheffield University, 492; R.I.B.A. representative at Annual Meeting of National Registration of Plumbers, 545.
- Edwards, H. M., appointed Surveyor and Clerk of Works, India Office, 486.
- Elkington, George: The Regulation of Architectural Competitions, 259.
- Emerson, Wm.: The First International Congress on Architectural Education, 351.
- Engineering Standards Association, The British, 62, 233; Grant from R.I.B.A., 423.
- Etchells, E. Fiander: Some Problems in the Construction of Buildings considered experimentally, 251.
- Examinations, 61, 234, 462; Special examination, 151; Intermediate [Results], 153; 548; Final and Special [Results], 153, 549; Special Examination in Design [Results], 154, 550; Examination in Professional Practice [Results], 154; Final: Alternative Problems in Design, 195; 232; 547; Partial exemption from, 422.
- Exhibitions: Exhibition of War Memorial Models and Photographs [Charles Ffoulkes], 20; Third Exhibition of the Architecture Club [Darcy Bradwell], 22, 30; The Thirteenth Exhibition of the Arts and Crafts Exhibition Society at Burlington House [N.R.], 150; [A. R. Powys], 189; Paris Exhibition Awards, 193; Exhibition of Architects' Working Drawings, 235; Architects' Water-colour Drawings at Paterson's Gallery, 255; Exhibition of Dominion, Colonial and Indian Architecture, 293, 545; Exhibition of Garden Architecture, 263, 293, 423; Exhibition of Drawings of Old Bridges in France, 318, 412; Exhibition of Work of Bertram Grosvenor Goodhue [Howard Robertson], 390; The Building Trades Exhibition [John E. Yerrbury], 391; Exhibition of Cotman's Drawings at Walker's Gallery [W. Hilton Nash], 483; Exhibition at Soane Museum of Sir John Vanbrugh's Drawings, 485; Annual Exhibition of Central School of Arts and Crafts [F. R. Hiorns], 490; Competitions of Industrial Designs, 543; Exhibition of Designs and Working Drawings at Cardiff Technical College, 548; Exhibition of Designs of Students of Recognised Schools, 583.
- Evans, E. H., 545.
- Evans, H. Godfrey, 574.
- Faber, Dr. Oscar: Some Problems in the Construction of Buildings considered experimentally, 249.
- Fees of Specialists and Consultants, 492.
- Ffoulkes, Charles: Exhibition of War Memorial Models and Photographs, 20.
- Fine Art Commission for Scotland, Proposed, 396.
- Fletcher, Sir Banister: The Regulation of Architectural Competitions, 256; Evidence before the Royal Commission on Thames Bridges, 611.
- Fletcher, Henry M.: Old Bridges of France, 340; Co-operation of Architect and Craftsman, 410; Exhibition of Water-colour Drawings of Old Bridges in France, 413.
- Forsyth, W. A.: Lincoln Cathedral, 227.
- Foundling Hospital Estate: Mr. D. Barclay Niven appointed R.I.B.A. representative on Committee, 152.
- Fox, Sir Francis: LINCOLN CATHEDRAL, 159, 179.
- Franck, J. Ernest: appointed to represent R.I.B.A. at Imperial Congress of Royal Sanitary Institute, 233; Annual Report, 457.
- Franco-British Union of Architects [H. P. L. Cart de Lafontaine], 421, 487.
- French Architecture, Modern Tendencies in [H. P. L. Cart de Lafontaine], 67, 228; [S. Woods Hill], 228.
- Fyfe, Theodore: Old English Houses [review], 19; The Art of Greece [review], 288; Roman Architecture [review], 315; The Palace of Knossos, 479; Wayfarer in Egypt [review], 539.
- Garden Cities and Town Planning Association, The, 352.
- GARDENS [F. Inigo Thomas], 431.
- Gardner, Professor E. A.: Vote of thanks to Mr. Goodhart-Rendel, 188.



- Garnier, Commemoration of the Centenary of the Birth of Charles, 84.  
 Geological Survey [G. N. Kent], 88.  
 Germany: Post-War Architecture in [Dr. Hermann Muthesius], 587.  
 Gibbon, Dr. I. G.: The Architect and his City, 46.  
 Gilbert, Cass: elected President of National Academy of America, 522.  
 Godfrey, Walter H.: Het Moderne Landhuis in Nederland [review], 52; The late Edmund Livingstone Wratton, 115; Lincoln Cathedral, 178.  
 Goldsmith, F. T. W.: R.I.B.A. Visit to Messrs. Courtauld's new premises, 291.  
 Goodhart-Rendel, H. S.: The Architecture of Regent Street, 112; Review of the Work submitted for the Prizes and Studentships, 180, 189; THE WORKS OF SIR THOMAS GRAHAM JACKSON, R.A., 467, 478.  
 Goodhue, Bertram Grosvenor [Howard Robertson], 390.  
 Goslett, A. H.: Appointed Honorary Auditor, 423.  
 Gotch, J. Alfred: Speech at Unveiling of Portrait, 9; Presentation, 230; The Second Volume of the Wren Society [review], 287; The St. Aldate's Site, 317.  
 Gotch, T. C., 11.  
 Granger, Professor Frank: Smaller English House of the later Renaissance [review], 540; Spanish Renaissance Architecture, 555.  
 Grayson, G. Hastwell: Reappointed Trustee of Elmes Testimonial Fund, 423.  
 Greenaway, F. H.: Speech at Presentation of R.I.B.A. Street Architecture Medal, 11.  
 Guildford Corporation Bill, 492.  
 Hake, G. D. Gordon: Elected Royal West of England Academician, 543.  
 Hall, E. Stanley: Waterloo Bridge, 144; The Regulation of Architectural Competitions, 258.  
 Hall, H. Austen: The late T. B. Whinney, 491.  
 Hallward, Reginald: Co-operation of Architect and Craftsman, 409.  
 Harris, E. Vincent: Appointed R.I.B.A. Representative at Sheffield University, 492.  
 Harvey, William: The Dome of the Rock in Jerusalem [review], 141; East Christian Art [review], 514.  
 Harvey, W. Alexander, and International Federation for Town and Country Planning, 492.  
 Hellenic Studies, Society for the Promotion of, 233.  
 Hendry, H. Duncan: The Wren Society, 317.  
 Hicks, George: The Condition of the Building Industry, 138.  
 Hill, S. Woods: Modern Tendencies in French Architecture, 228.  
 Hiorns, F. R.: Terra-cotta of the Italian Renaissance [review], 312; French Provincial Architecture [review], 415; Sketching in Lead Pencil for Architects and others [review], 450; Central School of Arts and Crafts, 490.  
 Holden, W. F. C.: Regulation of Competitions, 288.  
 Hopkins, Lt.-Col. P. A.: Appointed R.I.B.A. representative on Committee of British Waterworks Association, 545.  
 Horsburgh, Victor: Appointed Honorary Secretary for Canada, 522.  
 Housing, Mr. Neville Chamberlain on [Professor S. D. Adshead], 515.  
 Howard, Ebenezer: The Architect and his City, 48.  
 Hughes, H. C.: Francesco Borromini [review], 81; New Chapters in Greek Art [review], 451; The late Miss G. L. Bell, 520.  
 Hunt, John: Limited Competitions, 491.  
 Inigo Jones as a Collector [William Grant Keith], 95, 144.  
 Insurance of Clerks of Works, 117.  
 Insurance, National Health, 25, 87, 195, 234, 268, 356, 464, 524, 552.  
 Jackman, F. L.: Steel Houses and Architects, 288.  
 Jackson, Basil H.: The Works of Sir Thomas Graham Jackson, 478.  
 JACKSON, THE WORKS OF SIR THOMAS GRAHAM [H. S. Goodhart-Rendel], 467, 478; [Arthur Keen], 477; [Basil H. Jackson], 478; [E. Guy Dawber], 478.  
 Jeffery, Miss: The Making, Prevention and Unmaking of a Slum, 337.  
 Jenkins, Gilbert H.: The Architect and his City, 49; The Regulation of Architectural Competitions, 258.  
 Johnston, Philip Mainwaring: The Arts in Early England [review], 480.  
 Jones, Ronald P.: Architecture [review], 110; The Waterloo Bridge Debate at the L.C.C., 142.  
 Judge, Max: Vignola [review], 416.  
 of Architectural Competitions, 259; The Safety of the City Churches, 389; Annual Report, 457; The Works of Sir Thomas Graham Jackson, 477; Evidence before Royal Commission on Thames Bridges, 609.  
 Keith, William Grant: Inigo Jones as a Collector, 95.  
 Kent, G. N.: Geological Survey, 88.  
 Kitson, Sydney D.: A History of English Brickwork [review], 74; Oxford Renowned [review], 246.  
 Knossos, The Palace of [Theodore Fyfe], 479.  
 Knox, L. H.: The Architect and his City, 50.  
 Lanchester, H. V.: East Kent Regional Planning Scheme Preliminary Survey [review], 51; The Development of London and the Home Counties, 348.  
 Laurie, Professor A. P.: The Selection of Stone for Building, 55, 84; The Warping of Wood, 245; Stone Decay and the Preservation of Ancient Buildings, 440, 512, 538, 573.  
 Law of Property Act 1925 [J. Douglas Scott], 459; 492.  
 Lawrence, F. O.: Ostia, the Ancient Port of Rome, 597.  
 Legal: Atkinson and Long v. Wellbrook Sanitary Laundry Co. [J. Douglas Scott], 117; Kenneth Dalgliesh v. Sandown Urban District Council and others [J. Douglas Scott], 318; Oliver v. Pewsey Rural Council [W. E. Watson], 420; Banks v. Vaile Bros., 460; Horton v. Beattie [Percy J. Waldram], 618.  
 Lethaby, Professor W. R.: The late Canon H. F. Westlake, 114.  
 Leverton, W. J. H.: The Regulation of Architectural Competitions, 257.  
 Levita, Col. C. B.: The Making, Prevention and Unmaking of a Slum, 334.  
 Lewis, F.: The Making, Prevention and Unmaking of a Slum, 337.  
 Library, The: Notes by members of the Literature Committee on Recent Acquisitions, 82, 247, 255, 316, 350, 417, 451, 539; Drawings of Bodiam Castle presented by Mr. Harold Sands, 452.  
 Lighting in Towns. The Standard of Natural [Percy J. Waldram], 618.  
 Lighting of Picture Galleries [S. Hurst Seager], 20; [Percy J. Waldram], 52.  
 Lille War Memorial [C. F. A. Voysey], 288.  
 Limewash as a Stone Preservative, 316.  
 LINCOLN CATHEDRAL [Sir Charles Nicholson and Sir Francis Fox], 159, 179; [Lincoln, the Dean of], 178; [Basil Mott], 178; [R. S. Godfrey], 178; [Dr. D. H. S. Cranage], 179; [Dr. J. W. Mackail], 179; [W. A. Forsyth], 227.



- Lincoln, The Dean of: Lincoln Cathedral, 178.
- Lloyd, Nathaniel: Bodiam Castle [review], 442.
- Lochhead, James: appointed R.I.B.A. delegate to Conference on Prevention of Tuberculosis, 492.
- London Building Acts [Amendment] Act, 395, 522.
- London County Council: Drainage Bye-laws, 152; General Powers Bill, 294.
- London squares and open spaces, 293.
- Longden, Major A. A.: Paris Exhibition of Decorative Art, 286.
- Lovegrove, Gilbert H.: The Early History of Piccadilly, Leicester Square, Soho and their neighbourhood [review], 482.
- Lutyens, Sir Edwin: Report to the London County Council on Waterloo Bridge, 53; Awarded R.I.B.A. Street Architecture Medal, 486.
- MacAlister, Sir John Y. W., 84.
- Macartney, Mervyn: The late George Somers Clarke, 617.
- McGibbon, Alex.: The late Professor Charles Gourlay, 542.
- Mackail, Dr. J. W.: Lincoln Cathedral, 179.
- Mackmin, Henry A.: The Condition of the Building Industry, 191.
- Malverian Architects, Old, 396.
- Marks, Percy L.: Annual Report, 455.
- Marriott, Charles: Devonshire House Buildings, 349.
- Marten, W. H. Herbert: The Architect and his Work, 247.
- Matthews, Henry: The Condition of the Building Industry, 138.
- Measurement, Standard Method of, 545, 546.
- Members: Application for election, 118, 198, 232, 397, 423; Nomination of, 25, 197, 264, 294, 425; Election of, 30, 90, 232, 267, 294, 352, 355, 495, 545, 546, 621; [Honorary Fellows], Sir Frank Dicksee, 292; Lord Lee of Fareham, 545; [Honorary Associates], F. L. Griggs, 292; Sir William Davison, 545; Arnold Mitchell transferred to list of practising Fellows, 522; Licentiates and the Fellowship, 30; Special election to the Fellowship, 232; George Harry Gould, 521, 551; Reinstatement of [Associates], W. S. R. Bloomfield, 62; G. A. Gale, 152; F. E. Collington, 152; E. L. Hampshire, 233; D. W. Ayre, 294; F. H. Bromhead, 545; [Licentiates], R. T. Tilley, 62; William Davidson, 152; T. Frank Hawkes, 233; R. C. Jones, 522; Resignation of [Fellows], F. S. Baker, 62; A. Macpherson, 233; A. Paul MacAlister, 423; W. W. Scott-Moncrieff, 521; S. S. Reay, 522; W. White-Cooper, 522; P. Morley Horder, 545; [Associates], Robert W. Carden, 233; T. L. Perkins, 233; C. B. Reid, 294; Sydney Searle, 352; G. Leslie Head, 423; W. J. Leahy, 423; R. A. Walter, 423; A. K. Brown, 521; L. C. Brooks, 521; A. C. Denny, 521; A. T. Wright, 521; H. C. Richardson, 522; W. P. Schofield, 522; [Licentiates], V. A. Lawson, 62; Arthur Davies, 352; L. H. Bullock, 233; R. S. Cowper, 233; A. G. Hall, 233; D. Lyle, 233; James Neill, 233; J. F. Lancaster, 233; G. Anderton, 294; C. J. Ashworth, 294; F. R. Chalmers, 294; H. H. Danby, 294; Frederick Harrison, 294; Charles King, 294; John F. McIlwraith, 294; C. J. W. Simpson, 294; G. W. Tanner, 294; D. Thompson, 294; C. Ll. R. Tudor, 294; A. F. Poole, 521; T. H. Russell, 521; J. Stables, 521; H. J. Yorke, 522; W. A. Gagnon, 522; J. O. Harris, 522; G. H. Higginbottom, 522; Retirements [Fellows], W. Lister Newcombe, 352; Edward Hewetson, 545.
- Members' Column, 31, 64, 90, 120, 156, 200, 236, 267, 296, 324, 355, 400, 427, 464, 495, 524, 551, 584, 624.
- Members' Names on Notice Boards, 545.
- Membership: New Class of Subscribers, 24, 621; Composition of subscriptions for life, 423.
- Milburn, T. R.: The Regulation of Architectural Competitions, 259; Annual Report, 454.
- Millard, Walter J. N.: The late Leonard Aloysius Scott Stokes, 148.
- Milne, Oswald P.: Co-operation of Architect and Craftsman, 408.
- Mitchell, R. J.: The Making, Prevention and Unmaking of a Slum, 337.
- Minutes: Opening Meeting, 2 November, 32; 16 November, 64; 30 November, 90; 14 December, 120; 4 January, 156; 18 January, 200; 1 February, 236; 15 February, 267; 1 March, 296; 15 March, 324; [Special General Meeting], 29 March, 355; 19 April, 400; [Annual General Meeting], 3 May, 428; 14 June, 495; 21 June, 496.
- Moars, Frank: Appointed R.I.B.A. delegate to Archaeological Congress in Palestine and Syria, 152.
- Monson, E. C. P.: Appointed R.I.B.A. delegate to International Housing and Town Planning Congress, 522.
- "Morning Post," Editor of the: The Public Appreciation of Architecture, 390.
- Mott, Basil: Lincoln Cathedral, 178.
- Murray, James: The Condition of the Building Industry, 139.
- Muthesius, Dr. Hermann: Post-War Architecture in Germany, 587.
- Nash, W. Hilton: John Sell Cotman, 483.
- Nicholls, W. H.: The Condition of the Building Industry, 135.
- Nicholson, Sir Charles: LINCOLN CATHEDRAL, 159, 179.
- Niven, D. Barclay: Appointed R.I.B.A. representative on Joint Committee re Foundling Hospital Estate, 152.
- Notes from Minutes of Council Meetings: 2 November, 61; 14 December, 152; 18 January, 231; 15 February, 293; 15 March, 352; 19 April, 422; 31 May, 492, 521; 21 June, 522; 5 July, 544; 19 July, 545.
- Notices: 25, 62, 88, 117, 153, 197, 234, 264, 293, 322, 353, 396, 424, 462, 492, 522, 546, 583, 620.
- OBITUARY: Algar, Albert Edmund, 324; Ashworth, Charles Herbert, 262, 236; Ashworth, Samuel Bolton, 542; Baker, Francis Spence, 231, 236; Barnsley, Ernest [F. W. Troup], 289; Baron, Miles, 64; Bell, Miss G. L. [H. C. H.], 520; Benwell, John Wayland [G. Dale Oliver], 321, 324; Boni, Commendatore Giacomo, 64; Brierley, Walter Henry, 575; Calvert, Vere, 64; Calvert, Rhodes, 400; Cash, John, 462, 495; Chapman, Henry, 267, 291; Clarke, Somers, 576; [Mervyn Macartney], 617; Cockrill, Gilbert Scott, 400, 421; Cohen, J. B., 495; Cooke, William George, 156; Cowdell, William Morton, 64; Culshaw, Alfred, 428; Daubney, Charles Archibald, 120, 151; Davies, David, 64, 324; Dixon, Robert, 542; Dutch, Leonard Harris, 296; Ellison, Arnold J. T., 576; Evans, Evan Ivor, 428; Forbes, James, 231; Fox, Frank, 495; Fry, Lt.-Col. Peter George, 64; [C. F. W. Dening], 115; Fysh, Percy William, 64; Gale, Ernest Sewell, 120; Gardner, Alexander, 324; Garlick, Edward, 120; Garrood, Thomas Merrierson, 156; Gill-Knight, John Albert, 64; Gillespie, J. Gaff, 495, 520; Gourlay, Professor Charles [Alex. McGibbon], 542; Haslewood, Noel Alfred Fitzherbert, 64; Harrison, William Henry, 120; Homolle, Jean Theophile, 64; Houfton, P. B., 495; Howell, Albert, 64; Ingelow, Benjamin, 156; Jago, Ernest Thomas, 64; Jerman, James, 64; Johnson, Tom, 428; Jones, Rowland Lloyd, 64; Kennard, John Harold, 296; Lefroy, Professor Maxwell [Sir Frank Baines], 113; Leslie, Colonel Francis Seymour, 64, 115; Lord, Henry, 495; McWilliam, Alexander, 462, 495; Messervy, Charles, 64; Maybury, John Henry, 576; Murray, Robert Cuninghame, 496, 520; Newson, Charles, 64; Nordhagen, Olaf, 90; Paterson, Henry Leslie, 321, 324, 352; Pearson, Henry



- Dighton, 64; Pennell, Joseph, 428; Phipps, Harry, 267, 291; Plummer, Arthur Benjamin, 120; Ross, Alexander, 64; Ruthen, Sir Charles T. [Dr. Raymond Unwin], 618; Samson, Charles Henry, 64, 87; Sayer, Charles Edward, 575; Smith, Stephen Ernest, 64; Smith, P. Rider, 495; Spoor, Stanley Miles, 400; Stokes, Leonard Aloysius Scott [Walter J. N. Millard], 148; [George Drysdale], 149, 156; Tarring, Frederick William, 64; Thomas, Richard Wellings, 296, 321; Thomson, Alexander Caldwell, 57, 64; Thornycroft, Sir William Hamo, 156; Topott, William Thomas, 428; Walker, Fred, 400, 421; Watkins, William, 428, 462; Westlake, Canon H. F. [W. R. Lethaby], 114; Whinney, T. B. [H. Austen Hall], 491, 495; Williams, L. J., 421, 428; Wittet, George, 576 [Jn Begg]; 618 Wood, Walter Bryan, 236, 262; Wratten, Edmund Livingstone [Walter H. Godfrey], 115, 120; Wynne, John, 352, 355; Young, Robert Magill, 90.
- Old Bells in Ancient Churches [A. R. Powys], 52.
- Oliver, Basil: A Short History of the Building Crafts [review], 79.
- Oliver, G. Dale: The late John Weyland Benwell, 321.
- Ostberg, Professor Ragnar, 263.
- Ostia: The Ancient Port of Rome [F. O. Lawrence], 597.
- Oxford, The St. Aldate's Site [J. Alfred Gotch], 317.
- Paget, Sir Richard: The Architect and his City, 48.
- PARIS EXHIBITION OF DECORATIVE ART [Lt.-Col. H. W. G. Cole], 271, 286; [Sir William H. Clark], 284; [Sir Charles Walston], 285; [Dr. R. Anning Bell], 286; [Howard Robertson], 286; [Major A. A. Longden], 286; [E. Guy Dawber], 286.
- Pensions Act, The Contributory, 294.
- Pepler, G. L.: The Architect and his City, 45; The Making, Prevention and Unmaking of a Slum, 336.
- Peruzzi of Siena, The Life and Works of Baldassare [J. Hubert Worthington], 299.
- Pond, Irving K.: Co-operation of Architect and Craftsman, 408.
- Powys, A. R.: Old Bells in Ancient Churches, 52; The Thirteenth Exhibition of the Arts and Crafts Exhibition Society at Burlington House, 189; Lord Crawford's Evidence before the Royal Commission on Thames Bridges, 606.
- President's Addresses: INAUGURAL ADDRESS, 1; ADDRESS TO STUDENTS, 203.
- Prizes and Studentships: R.I.B.A. [Archibald Dawney] Scholarships (Awards) 24, 620; R.I.B.A. Silver Medal for Recognised Schools, 24; R.I.B.A. Diploma in Town-Planning, 87; R.I.B.A. [Henry Jarvis] ex-Service Scholarships, 87; Prizes and Studentships, 1926, Review of the Work submitted for the [H. S. Goodhart-Rendel], 180, 189; [Professor E. A. Gardner], 188; [Professor Leslie Wilkinson], 188; [E. Guy Dawber], 189; Deed of Award, 194, 231; R.I.B.A. [Anderson and Webb] Scholarship, 197; 233; Rome Scholarship in Architecture, 263, 521; Henry Jarvis Studentship, 263, 521; R.I.B.A. Maintenance Scholarship, 294, 319, 422, 547; Pamphlet, 396; Prizes and Competitions Overseas, 422; Victory Scholarship and Tite Prize, 547; R.I.B.A. [Henry Saxon Snell] Prize, 620.
- Probationers R.I.B.A., 293, 548, 576; Registration of, 583.
- Public Administration, Institute of, 262.
- Public Appointments, Members of the R.I.B.A. and, 117, 152.
- Public Works, Roads and Transport Congress, 546.
- Publications, Autumn, 24.
- Queen Alexandra, Address sent to the King on the death of, 83.
- Rahbula, Ernest A. R.: Westminster Abbey Re-examined [review], 226; Westminster Abbey and its Ancient Art [review], 482.
- Ramsey, Stanley C.: The Sociological Basis of Architecture, 12.
- Ransome, James: The Condition of the Building Industry, 192; Broadcast Criticism, 616.
- Ravnham Hall, Norfolk [Sir Reginald Blomfield], 527.
- Reavell, Lt.-Col. G.: R.I.B.A. Representative at Annual Meeting of Institution of Public Lighting Engineers, 545.
- Regent Street, The Architecture of [H. S. Goodhart-Rendel], 112.
- Register of Architects willing to take recognised school students in their offices, 24, 61.
- Registration [Major Harry Barnes], 20, 545.
- Reilly, Professor C. H.: Report of the Birmingham Civic Society [review], 80.
- Reinforced Concrete Regulations, 492.
- REVIEWS: J. A. Gotch's *Old English Houses* [Theodore Fyfe], 19; *East Kent Regional Planning Scheme Preliminary Survey* [H. V. Lanchester], 51; K. Sluyterman and A. J. Van der Steur's *Het Moderne Landhuis in Nederland* [Walter H. Godfrey], 52; Nathaniel Lloyd's *History of English Brickwork* [Sydney D. Kitson], 74; Martin S. Briggs' *Short History of the Building Crafts* [Basil Oliver], 79; Report of the Birmingham Civic Society [C. H. Reilly], 80; William Godfrey Newton's *Prelude to Architecture* [A. S. G. Butler], 81; M. and C. H. B. Quennell's *Everyday Life in Roman Britain* [William T. Benslyn], 81; Eberhard Hempel's *Francesco Borromini* [H. C. Hughes], 81; Sir T. G. Jackson's *Architecture* [Ronald P. Jones], 110; James Bone's *London Perambulator* [A. E. Richardson], 111; Arthur Crow's *Notes on the Clerks' Well* [W.P.S.], 112; Ernest Tatham Richmond's *Dome of the Rock in Jerusalem* [William Harvey], 141; Professor W. R. Lethaby's *Westminster Abbey Re-examined* [Ernest A. R. Rahbula], 226; Handbook of Proceedings of International Congress on Architectural Education [The Earl of Crawford and Balcarres], 239; Professor A. E. Richardson's *English Inn, Past and Present* and D. C. Maynard's *The Old Inns of Kent* [C. J. Tait], 241; L. Rice-Oxley's *Oxford Renowned* [Sydney D. Kitson], 246; R. Hardy Syms' *Consett Urban District Council* [W. Harding Thompson], 247; The Second Volume of the Wren Society [J. Alfred Gotch], 287; *Dutch Architecture of the Twentieth Century* [C. J. Tait], 287; E. A. Gardner's *Art of Greece* [D. T. F.], 288; William Winthrop Kent's *Life and Works of Baldassare Peruzzi of Siena* [J. Hubert Worthington], 299; *Terra-cotta of the Italian Renaissance* [F. R. Hiorns], 312; Paul Parent's *L'Architecture des Pays-Bas Meridionaux* [Charles E. Sayer], 313; Walter C. Voss and Ralph Coolidge Henry's *Architectural Construction* [Sidney Toy], 313; H. S. Goodhart-Rendel's *Nicholas Hawksmoor* [C. J. Tait], 314; G. T. Rivoira's *Roman Architecture* [Theodore Fyfe], 315; Howard Robertson's *Architecture Explained* [C. F. A. Voysey], 414; J. O. Kettridge's *Technical Dictionary* [W. P. Steel], 414; *Year Book of the Architectural League of New York*, 1925 [A. E. Richardson], 415; P. L. Goodwin and H. O. Milliken's *French Provincial Architecture* [F. R. Hiorns], 415; Pierre Esquié's *Vignola* [Max Judge], 416; *Specification* [W. E. Vernon Crompton], 417; Lord Curzon's *Bodiam Castle, Sussex* [Nathaniel Lloyd], 442; Professor Patrick Aber-



- crombie's *Preservation of Rural England* [Professor S. D. Adshead], 444; George P. Bankart's *Modern Plasterwork Construction* [Arthur Bartlett], 445; William Harvey's *Modern Building Practice* [Martin S. Briggs], 449; E. Beresford Chancellor's *West End of Yesterday and To-day* [C. J. Tait], 449; Jasper Salwey's *Sketching in Lead Pencil for Architects and others* [F. R. Hiorns], 450; Percy Gardner's *New Chapters in Greek Art* [H. C. Hughes], 451; Shepherd and Jellicoe's *Italian Gardens of the Renaissance* [I.M.C.], 451; G. Baldwin Brown's *Arts in Early England* [Phillip Mainwaring Johnston], 480; C. L. Kingsford's *Early History of Piccadilly, Leicester Square, Soho and their Neighbourhood* [Gilbert H. Lovegrove], 482; J. G. Noppen's *Westminster Abbey and its Ancient Art* [Ernest A. R. Rabbula], 482; O. M. Dalton's *East Christian Art* [William Harvey], 514; Annie A. Quibell's *Wayfarer in Egypt* [D. T. F.], 539; *Old Domestic Architecture of Holland* [I. M. Chambers], 539; A. E. Richardson and H. Donaldson Eberlein's *Smaller English House of the Later Renaissance* [Professor Frank Granger], 540; *Books Illustrating Paris Exhibition of Decorative Art* [J. Murray Easton], 616.
- R.I.B.A. Annual Elections: [Nominations], 424; [Results], 493.
- R.I.B.A. Bye-law, 25, 352; R.I.B.A. Conference, 293; R.I.B.A. Soirée, 30, 58; R.I.B.A. Telephone Numbers, 31; General Meetings, 619.
- R.I.B.A. Forms of Contract [Edmund W. Wimperis], 144, 294; [W. E. Watson], 192; [F. J. Cooke], 192.
- R.I.B.A. Garden Party, 543.
- R.I.B.A. Street Architecture Medal, Presentation of, 11; 293; Awarded to Sir Edwin Lutyens, 486.
- Richardson, Professor A. E.: The London Perambulator [review], 111; Architecture from the Structural Point of View, 307; Year Book of the Architectural League of New York [review], 415; Elements of Design and the Teaching of Building Construction, 612.
- Richmond, Ernest T., 233.
- Roads, The Widening of [Frank W. Simon], 351.
- Robertson, Howard: Paris Exhibition of Decorative Art, 286; Bertram Grosvenor Goodhue, 390.
- Royal Gold Medal: Professor Ragnar Östberg nominated, 263; elected by members, 352; approved by King, 390.
- Royal West of England Academy School of Architecture: Grant from R.I.B.A., 423.
- St. Dunstan's Hospital, 461.
- Sands, Harold: Presentation of Drawings of Bodiam Castle to the Library, 452.
- Sanitary Institute, Jubilee of the Royal [Sir Henry Tanner], 351.
- Sayer, Charles E.: L'Architecture des Pays-Bas Meridionaux [review], 313.
- Scale of Charges, 490, 492; [Wilfrid Travers], 516; [A. H. M. Brice], 517; [W. E. Watson], 517, 574; [Courtney M. Crickmer], 517; The Forestry Commission and the, 522.
- Scott, Gilbee: Annual Report, 455.
- Scott, J. Douglas: Atkinson and Long v. Wellbrook Sanitary Laundry Co., 117; Kenneth Dalgliesh v. Sandown Urban District Council and others, 318; Law of Property Act, 1925, 459; appointed R.I.B.A. representative at International Congress on Bribery, 492.
- Seager, S. Hurst: Lighting of Picture Galleries, 20; Elected President of New Zealand Institute of Architects, 395.
- Searles-Wood, H. D.: Appointed to represent R.I.B.A. at Imperial Congress of Royal Sanitary Institute, 233; The Regulation of Architectural Competitions, 257; Appointed R.I.B.A. representative on Committee of British Waterworks' Association, 545.
- Shakespeare Memorial Theatre, 452.
- Sheringham, George: Co-operation of Architect and Craftsman, 409.
- Simon, Frank W.: The Widening of Roads, 351.
- SLUM, THE MAKING, PREVENTION AND UNMAKING OF A [George H. Duckworth], 327, 337; [Col. C. B. Levita], 334; [Dr. Raymond Unwin], 335; [Arthur Crow], 336; [G. L. Pepler], 336; [R. J. Mitchell], 337; [Miss Jeffery], 337; [F. Lewis], 337; [E. Guy Dawber], 337.
- Smoke: Abatement League, 294; Prevention, 522.
- Soane: The Life and Work of Sir John [H. J. Birnsting], 20.
- Society of Architects: The Amalgamation of the R.I.B.A. and the, 231; Disposal of Assets, 322; The History of the [C. McArthur Butler], 518.
- Spanish Renaissance Architecture [Professor Frank Granger], 555.
- Steel Houses and Architects [F. L. Jackman], 288.
- Steel, W. P.: The Clerks' Well [review], 112; Kettridge's Technical Dictionary [review], 414.
- Steele, H. Rooksby: An Architectural History of the Bank of England, 499, 530, 562.
- Stone Decay and the Preservation of Ancient Buildings [A. P. Laurie], 440, 512, 538, 573.
- Stone for Building: Selection of [A. P. Laurie], 55, 84.
- Stone Preservation [Edward P. Warren], 109.
- Stone: The Weathering of [Laurence A. Turner], 192.
- Students R.I.B.A., 232, 294, 352, 422, 522, 545; Evening at the R.I.B.A., 292.
- Surveyors' Institution: Mr. Dendy Watney elected President, 461.
- Tait, C. J.; The Old Inns of England [review], 241; Dutch Architecture of the Twentieth Century [review], 287; Nicolas Hawksmoor [review], 314; The West End of Yesterday and To-day [review], 449.
- Tanner, Sir Henry: Jubilee of the Royal Sanitary Institute, 351.
- Tapper, Walter, elected A.R.A., 420.
- Taylor, Andrew T.; Knighthood conferred on, 518.
- Taylor, Francis R.: The Regulation of Architectural Competitions, 260; Visit to Chiswick House, 419.
- Tendering, Restrictions on, 24, 62, 294.
- Tenders, Wages slips on, 151, 422.
- Thames Bridges: Royal Commission to be appointed, 486; Members of the Royal Commission, 543; Lord Crawford's Evidence before the Commission [A. R. Powys], 606; Mr. Arthur Keen, 609; Sir Banister Fletcher, 611.
- Thomas, Sir A. Brumwell: R.I.B.A. representative on Ancient Monuments Committee, 545.
- Thomas, F. Inigo: GARDENS, 431.
- Thompson, W. Harding: The New Arterial Roads of Greater London, 145; Consett Urban District Council [review], 247; International Federation for Town and Country Planning, 492.
- Thorne, Fred: The Condition of the Building Industry, 138.
- Toop, F. J.: appointed Honorary Auditor, 423.
- Town Planning at Vienna, Conference on Housing and, 353; E. C. P. Monson appointed R.I.B.A. Delegate, 522.
- Town Planning, National Housing and, 396; Schemes, 57, 85, 151.
- Toy, Sidney: Architectural Construction [review], 313.
- Travers, Wilfred: Scale of Charges, 516.
- Troup, F. W.: The late Ernest Barnsley, 289.
- Turner, Laurence A.: The Weathering of Stone, 192; CO-OPERATION OF ARCHITECT AND CRAFTSMAN, 406, 411.
- Twickenham, Riverside Amenities, 152, 423.



- University College, London, 548.
- Unwin, Dr. Raymond: *THE ARCHITECT AND HIS CITY*, 35, 50; *The Making, Prevention and Unmaking of a Slum*, 335; *The late Sir Charles T. Ruthen*, 618.
- Ur, Excavations at, 24.
- Vanbrugh, Sir John [Arthur T. Bolton], 338; Exhibition at the Soane Museum, 485.
- Visits: Art Committee, 116; Messrs. Courtaulds' new premises [F. T. W. Goldsmith], 291.
- Voysey, C. F. A.: *Lille War Memorial*, 288; *Co-operation of Architect and Craftsman*, 408; *Architecture Explained* [review], 414.
- Waid, D. Everett: *The American Institute of Architects and Waterloo Bridge*, 20.
- Waldram, Percy J.: *Lighting of Picture Galleries*, 52; *Some Problems in the Construction of Buildings considered experimentally*, 250; *The Standard of Natural Lighting in Towns*, 618.
- Wales, H.R.H. Prince of, 574, 620.
- Walston, Sir Charles: *Paris Exhibition of Decorative Art*, 285.
- Ward, B. R.: *Awarded Henry Jarvis Travelling Studentship*, 545.
- Ward, C. F.: *The Regulation of Architectural Competitions*, 260.
- Warren, Edward P.: *The Architect and his City*, 49; *Stone Preservation*, 109.
- Waterloo Bridge, 61, 112, 317, 351; *The American Institute of Architects and* [D. Everett Waid], 20; *Sir Edwin Lutyens's Report to the London County Council*, 53; *Letter from Sir Reginald Blomfield*, 54; *Debate at the L.C.C.* [Ronald P. Jones], 142; [E. Guy Dawber], 144; [E. Stanley Hall], 144; *Debate in House of Commons*, 418; *Letters sent to Prime Minister*, 446; *L.C.C. and the Royal Commission*, 486; *Members of Royal Commission*, 543.
- Waterworks Association, *The British*, 62.
- Watney, Dendy: *Elected President of Surveyors' Institution*, 461.
- Watson, W. E.: *R.I.B.A. Forms of Contract*, 192; *Housing Scheme: Architects' Remuneration for Abandoned Work*, 420; *Scale of Charges*, 517, 574.
- Webb, Maurice E.: *The Condition of the Building Industry*, 139; *appointed R.I.B.A. representative on University of London Architectural Education Committee*, 152; *Board of Architectural Education*, 191; *The Regulation of Architectural Competitions*, 258; *Co-operation of Architect and Craftsman*, 410.
- Welch, Herbert A.: *THE CONDITION OF THE BUILDING INDUSTRY*, 123, 140, 253; *The Regulation of Architectural Competitions*, 257, 258, 259.
- Wells, J.: *Vote of Thanks to President*, 207.
- Who's Who in Architecture, 290.
- Wilkinson, Professor Leslie: *Vote of Thanks to Mr. Goodhart-Rendel*, 188.
- Wills, H. W.: *The Regulation of Architectural Competitions*, 256, 259.
- Wimperis, Edmund W.: *R.I.B.A. Forms of Contract*, 144.
- Wood, *The Warping of* [A. P. Laurie], 245.
- Wood, William W., 262.
- Woodward, William: *Annual Report*, 453.
- Worthington, Professor J. Hubert: *The Life and Works of Baldassare Peruzzi* [review], 299.
- Wren Society, *The* [H. Duncan Hendry], 317, 420; *Proposed Memorial to Sir Christopher*, 519, 522, 543, 574.
- Yerbury, John E.: *The Building Trades Exhibition*, 391.



# List of Illustrations

- Architect and Craftsman, Co-operation : Head-piece, 403.
- Architect and His City : Winchester, T.C., 35 ; City of Bristol, 37 ; Camberwell M.B.C., 37 ; Less Successful Designs, 41 ; Manchester C.B., 41 ; Newburn U.D.C., 43.
- Architectural Education : Map showing distribution of schools, 190.
- Architecture, The Sociological Basis of : Diagram 12.
- Bank of England : An Architectural History of the : Plans and Elevations, 499, 501, 505, 509, 530, 532, 562 ; Entrance to Mercers' Hall and Chapel 500 ; Grocers' Hall, 500 ; South Front of the Bank, 502 ; Front Courtyard, 503, 504 ; Taylor's Rotunda, 506 ; Taylor's Transfer Office, 506 ; South Front in 1790, 507 ; Threadneedle Street and Cornhill, 507 ; Court Room, 510 ; Reduced Annuity Office, 510 ; Garden Court, 511 ; Stock Office, 531 ; North Front, 533 ; Lothbury Courtyard, 535 ; Consols Office, 535 ; Soane's Rotunda, 536 ; Lothbury and Princes Street, 563 ; Tivoli Corner, 564 ; Loggia and Governor's Court, 564 ; £5 note office, 565 ; Princes Street Entrance Vestibule, 566 ; Diagonal Passage, 567 ; Old Dividend Office, 568 ; Bartholomew Lane Front, 569 ; Dividend Pay Office, 571 ; South Front 1848, 571.
- Birmingham Architectural Association : Presidential Badge, 320.
- Bodiam Castle : 442 ; 443.
- Bridges of France, Old : The Pont Marie, Paris, 326 ; Bridge at Blois, 340 ; Lavaur, 341 ; Carcassonne, 342 ; Orthez, 343 ; Cahors, 344 ; Châlon-sur-Saône, 344 ; Airvault, 345 ; Espalion, 346 ; Gueugnon, 346 ; Claix, 347.
- Construction of Buildings considered experimentally, Some Problems in the : Diagrams, 210, 212, 214, 215, 217, 218, 219, 221, 224, 225 ; Tables, 213, 215, 216, 218, 220, 222.
- Cotman, John Sell : Terrington Saint Clement's Church, Norfolk, 483 ; Ruined Pier of Crossing of Thetford Abbey Church, 484.
- Dewber, E. Guy : portrait to face p. 1.
- French Architecture, Modern Tendencies in : Eglise Saint-Louis à Vincennes, 67, 71 ; Eglise Notre Dame le Raincy, 68 ; Maison de Rapport, 69 ; Bureau de Poste, 70.
- Gardens : Sketch at Drakelow, 430 ; Fountain on Pincio, Rome, 431 ; Fountains Hall, 434 ; St. Catherine's Court, near Bath, 434 ; Beal Castle, 434 ; At Versailles, 434 ; At Fontainebleau, 435 ; on Lake Como, 436 ;
- Casino del Papa, Vatican Gardens, 436 ; Fountain at Villa Torlonia, Frascati, 436 ; Villa Lante, La Tavola, 437 ; Pergola at Villa Lante, 437 ; Villa Aldobrandini, Frascati, 437 ; Near Bayeux, 437 ; Lead Figure at Melbourne, Derbyshire, 439 ; Lead-work at Versailles, 439.
- Germany, Post-War Architecture in : Rhine Hall, Dusseldorf Exhibition, 387 ; Garden City Dwelling Houses at Zehlendorf, West, 588 ; Houses at München-Laim, 589 ; Charlottenburg, 589 ; Berlin, 589 ; Berlin-Neukölln, 590 ; Wittenau, 590 ; Grunewald, 591 ; Board School, Hamburg, 592 ; Dresden Bank, Chemnitz, 593 ; Factory Buildings at Oberhausen, 594 ; Nürnberg, 594 ; Dusseldorf, 594 ; Auditorium of big Theatre, 595 ; Interior of Wireless Exhibition Hall, Berlin, 595.
- Inigo Jones as a Collector : The so-called Arch of Jupiter, Verona, 94 ; Original Elevation for General Wade's House, 95 ; Copies by John Webb of Palladio's Plans and Drawings, 97, 98, 101, 104 ; Undescribed Plan of a House by Palladio, 97, 99 ; Plan of a Block of Four Houses, 97 ; Alternative Plans for House, 99 ; Plan and Elevation of House, 100 ; Three Studies by John Webb, 103 ; Original Study by Palladio, 103 ; For the Palazzo Valmarana, 105 ; For Palazzo Porto, 106 ; For Doric and Ionic Orders, 107.
- Inns of England, the Old : The Eagle Yard, Cambridge, 241 ; The George, Stamford, 242 ; The Leather Bottle, Cobham, 243 ; The Red Lion, Wingham, 244.
- Jackson, The Works of Sir Thomas Graham : Brasenose College, 466 ; High School for Girls, 467 ; Piano-forte, 469 ; Hertford College Chapel, 471 ; Giggleswick School Chapel, 475 ; Interior, 476.
- Lefroy, The late Professor Maxwell : 113.
- Lighting of Picture Galleries : The Art Institute of Chicago, 21.
- Lincoln Cathedral : General View, 159 ; Plan, 160 ; West Front, 161 ; Elevation, 162 ; Longitudinal Section, 163 ; Nave, 165 ; Transept, 167 ; North Wall of Central Tower, 171 ; Arch broken above lantern of Central Tower, 171 ; West Front Scaffolding, 173 ; North-west Tower, 174, 175 ; Soffit of arch crack filled with wood wedges, 176 ; Bosses, 177.
- Ostia : Section along Via del Tempio, 597 ; Harbour of Claudius and Trajan, 598 ; General Plan, 598 ; Photograph looking across Forum, 599 ; Staircase in Via del Tempio, 599 ; Reconstruction of house, 600 ; Photographs of drawings, 601 ; Cortili of the Horrea Epagathiana et Epaphroditiana, 602 ; Arcade, 603 ; Balcony, 603 ; Insula dei Dipinti, 604, 605.
- Paris Exhibition of Decorative Art : British Pavilion, 270 ; Pont Alexandre III, 271 ; Staircase of Honour, 273 ; Porte d'Honneur, 273 ; Pavillon du Collectionneur, 274 ; Garden of Ville de Paris, 276 ; Sevres Pavilion, 276 ; Dining Rooms, 277 ; Jardin des Nymphéas, 278 ; British Restaurant and Garden, 278 ; Maison Bretonne, 280 ; Hall of Pavilion Primavera, 281 ; Parfumerie, 281 ; Pavillon de la Ville de Paris, 282 ; Dining Room, 283.
- Peruzzi of Siena. The Life and Works of Baldassare : Portrait, 298 ; Chapel outside Porta Camollia, Siena, 299 ; Plan for Palace for Conte di Pitigliano, 300 ; From Sketch-book, 301 ; Fresco in Ponzetti Chapel, 303 ; Vigna di Papa Giulio III, 305.
- Prizes and Studentships : Review of Work submitted : Monument to National Hero, 182, 183 ; Swimming Bath, 184, 185 ; Elevations and Sections of Flats, 187 ; Plan of First and Second Floors, 187.
- Raynham Hall, Norfolk : Drawing by Sir Reginald Blomfield, 526 ; South Elevation, 527 ; First Floor Plan, 528 ; Ground Plan, 528 ; North Elevation, 529.
- R.I.B.A. Collection : From Original Drawings by Giuseppe Galli da Bibiena, 34, 122 ; From Mauro Tesi, 66 ; From F. Galli da Bibiena, 158, 358 ; From G. M. Oppenordt, 202 ; From G. P. Pannini, 238, 402 ; Sketch for decoration of Staircase by Sir James Thornhill, 408 ; Charles V Palace, Granada : Interior of Courtyard, by A. N. Prentice, 554. Drawing attributed to Charles le Brun, 586.
- R.I.B.A. Street Architecture Medal : The Auctioneers' and Estate Agents' Institute, 10.
- Roads of Greater London, The New Arterial : Diagrams, 145, 146, 147.
- Slum, The Making, Prevention and Unmaking of a : Plans, 329, 330.
- Spanish Renaissance Architecture : Charles V Palace, Granada, 554 ; Granada Cathedral : View of Interior, 556 ; Interior of Santa Maria La Blanca, 557 ; The Escorial, near Madrid, 559 ; Toledo Cathedral : The "Trasparente," 560.
- Stone Decay and Preservation of Ancient Buildings : Diagrams, 440, 512, 513.
- Wessex Society ; Presidential Badge, 116.









W. H. SMITH & SON  
STAMFORD ST.  
LONDON  
S.E.1









*Elliot and Fry*

MR. F. GUY DAWBER, PRESIDENT R.I.B.A.





NINETY-SECOND SESSION 1925-26

## THE INAUGURAL ADDRESS

BY THE PRESIDENT (MR. E. GUY DAWBER)

*[Delivered at the General Meeting on Monday, 2 November 1925]*

LADIES AND GENTLEMEN,—To follow such eminent men as we have had as Presidents would be difficult at any time, but in the immediate past years we have had those to preside over the affairs of the Royal Institute who by their attainments and erudition have so marked the epochs during which they held office, that to succeed them in the chair is a great honour and a greater responsibility.

I cannot attempt to emulate the delightful humour, the keen wit and the profound scholarship of our past president, Mr. Gotch, whose addresses will always remain in our memories; nor the peculiar grace and felicitous language of Mr. Paul Waterhouse, whose playful whimsicalities charmed us all; a man whose untimely and sudden death since we last met in this room we all deplore, for by his sound common sense and his geniality he had endeared himself to every one. Which of us who heard it will ever forget the noble eulogium pronounced by him at the Wren Bi-centenary banquet, one of the most remarkable tributes ever paid to the great master of architecture?

Mr. Gotch has for the last two years occupied a

unique position in that he is the first architect representing the provinces who has been President, and it must have been a matter of great gratification to him that he was selected for this honour. His second year of office will always be memorable, for in that year was carried to fruition the work that we trust is for the greatest good of the whole profession—the amalgamation of the Royal Institute and the Society of Architects.

This measure so long wished for, but so long delayed, has at last given to the architectural profession one single and undivided body, which, with its great Federation of Allied Societies in all parts of the United Kingdom and the Empire, is now in a position to speak with authority on behalf of a united profession. Everyone who has had anything to do with the amalgamation acknowledges the tact and good feeling shown on both sides, and the generous spirit in which the Society of Architects, whose members we gladly welcome into our ranks, have met us.

The majority of architects in this country look to Registration as a necessary measure for giving to qualified architects the same professional status

and protection that are afforded to the other registered professions, and the first use to which our new organisations will be put is the attainment of Statutory Registration.

A Committee is now completing the draft of a Registration Bill, and after the necessary negotiations with other interests concerned are concluded, it is the intention of the Institute to promote this Bill in Parliament with the utmost energy until it becomes law. We feel we can rely upon the cordial support of our members and our Allied Societies to see this through.

Now that our differences are settled and a future policy agreed upon, the Institute can devote its energies "to the advancement of Civic Architecture," to quote the words of our Charter—and to education—aims so interwoven that it is difficult to separate them.

One of our most important duties is to maintain a high standard of education in the profession. The Institute is not a teaching body, but through our examination system we are in touch with the teaching given in the recognised schools, not only in Great Britain, but throughout the Empire. The duties of our Board of Architectural Education become every year more onerous and a vast amount of time is given by its members to work which is little known or appreciated. The Board controls the examinations, its members visit and report upon the work of all recognised schools and they arrange the competitions for the valuable bursaries, prizes and scholarships under the authority of the Royal Institute.

During the past few years great changes have been made owing to the increasing number of Universities and Technical Colleges which now include architecture as one of the subjects for degrees and diplomas. In the old days we relied upon external examiners to see that the school standard was equal to that of the Institute examinations, but latterly it has been found impossible to compare by this means the standards reached in various schools working under different conditions. The Institute has therefore set up a small board of architects, who visit all the schools to report upon the staff, curriculum and equipment, and this has been found most helpful to the schools as well as to the Board of Architectural Education.

It is not our aim to mould all the schools after one type, but to encourage and develop the best features in their various courses, and we propose

to invite the great Universities, the Board of Education, the London County Council and other bodies, to appoint representatives to sit upon our Board of Architectural Education—to assist us in the non-technical side of our work with their experience. We are convinced this is the right method to adopt if architectural education is to keep fully abreast of modern requirements.

That these requirements are great I cannot too strongly urge upon the young men taking up the study of architecture to-day. Genius alone may enable a man, to some extent, to avoid the pitfalls of ignorance; but the immense development of new methods of construction, the keen competition and the improving standards of education, demand on the part of the ordinary man the best general technical and artistic training that he can acquire if he is to attain a reasonable amount of success in making a livelihood. I feel very strongly, however, that with all this more or less theoretical training we must not neglect the more practical side of our profession. One of the methods proposed is for students after their course of school training to go direct into an architect's office. If they were to go instead for six months into the workshops and to spend a further period as clerks of works upon some large or even medium-sized building, they would gain practical knowledge and, in my opinion, be better qualified to start practice than by coming straight from the schools or even from an architect's office.

The old system of pupilage doubtless had its drawbacks, and was sometimes greatly abused, but we must not forget that all our greatest architects had their training in this way.

On the general subject of architecture it may seem almost superfluous for me to address you, were it not that long custom has imposed upon your President the responsibility of doing so at the opening of a new session.

A country's history is written in its architecture, and to us it is absorbingly interesting to note how architecture crystallises the tendencies of an age and to mark the extent to which it may, and, indeed must express, the culture of an entire generation. Architecture is not made, it grows out of the necessities and requirements of a nation, and the attitude of the public towards it is to a great extent the social reflex of contemporary civilisation. Without a love and care for art, no nation has ever arrived at any point of eminence.



Architecture as a social art involves a number of conditions which do not exist in an art which is individualistic. This distinction explains other considerations which affect the question of public taste. The fact is that few works of art have ever received the unanimous approval of the world. One may safely say that two-thirds of mankind desire to be led and are always on the look-out for a lead ; they want to have opinions but have not thought out enough material on which to base them, and so they readily follow some leader. It is of the greatest importance therefore that the public should cultivate some art sense. The average citizen should demand and appreciate attractive and well arranged cities, beautiful parks and gardens and well designed buildings, for greater interest and appreciation on the part of the public will add new inspiration to the efforts of architects and craftsmen.

Some say that everything popular must be bad ; some urge that the claims of commerce lead to the neglect of good architecture ; others that the noble tradition of architecture is being debased by its surrender to purely utilitarian considerations ; but few, I am sure, will dispute that one of the most helpful aids towards a better appreciation of architecture to-day is that the great pioneers in trade and commerce are erecting some of the finest modern buildings. Can we, for instance, contemplate the new Bank of England, the Britannic House in Finsbury Square, the new Midland Bank in Cheapside, Lloyd's Exchange, the new Holt building in Liverpool, and many others in London and the provinces, without acknowledging that commercial architecture is rapidly taking a high place in our civic life ?

If we think of the buildings that would have been erected for such purposes half a century ago we need not be despondent about the future or fail to recognise that amongst our business people, at any rate, an appreciation of architecture is growing.

Some of our critics consider much that is being done in our towns and cities is " ugly, coarse and soulless "—to quote from a letter in *The Times* of last July—and cite the buildings at Wembley and Adelaide House and Wellington Street in the Strand as examples ; but may we not, on the other hand, regard these typical specimens of buildings as an endeavour on the part of the designers to get away from the banalities of so-called period architecture and the too slavish imitation of the past ? Is it not

the fact that the public for so long have been used to that sort of thing that any attempt at originality or a departure from the conventional is bound at first to meet with disapproval ?

When we think of the heated discussions we have had this year over the Hudson Memorial and Epstein's " Rima " in Hyde Park, on the one hand, and over Gilbert's fountain and " Eros " in Piccadilly Circus, on the other, does it not make one sceptical as to the value of current opinion regarding any work of art that is new and strange ?

Thirty years ago the Shaftesbury Memorial with " Eros " was the butt of criticism as vehement as that levelled at " Rima " to-day. It was a " hideous structure," a " big satire," an " incoherent mass of metal with neither simplicity nor purity of design," and more to the same effect, though some few, ahead of the crowd, considered the memorial " beyond all question a noble work of art," an opinion which has been fully endorsed by time. To-day " Rima " has been as severely criticised, but in this case, I think, more justly. Does not all this inconsistency of expressed opinion make us wonder whether public taste exists and, if it does, whether it is of any value at all ? One is reminded of the remark of Tacitus : " The public is no real judge of what is good or bad."

With regard to architecture, we should welcome criticism of our work, even friendly abuse, because it is evidence that the public are beginning to take an interest in architecture and to notice what they think are its merits or failings and this is one great step towards their not only demanding but obtaining architecture worth having.

If with improved taste on the part of the public, and better education on the part of architects, we have better buildings in our towns, should we not treat them properly and not disfigure them with vulgar signs and advertisements ?

We are living in an age of advertisement ; the victory of vulgarity over the decent reticence which once was a main characteristic of our countrymen has of late years seemed to overstep all bounds. There is a place for everything and a right and wrong way of doing things: the place for advertisements is not on buildings and in positions where they are an offence to the eye and an outrage upon public taste. The right way of drawing attention to a product is to enlist the sympathetic consideration of the potential purchaser and not to set his nerves on edge and

shock his feelings by forcing the article on him at all times and seasons in the crudest possible manner.

A strident siren deafening our ears would not be tolerated for one minute, yet advertisements that equally offend the eye are accepted without protest.

In many of our towns—London in particular—fine buildings are disfigured and architectural features entirely obliterated by signs and letters many feet high, out of scale with their surroundings, spoiling and vulgarising the whole façade. Think what our streets would be like if all the names and advertisements were confined to the fascia board only—all, so to speak, hung on the line! What a comparatively agreeable picture gallery they would become!

If this is the case in our towns and cities, what of the country? How continually we see roadsides and villages marred by notice boards, advertising some patent medicine, tea or whisky, with a repetition that actually defeats its own object. A few years ago nobody would have dreamt of advertising in this manner, but to-day everyone is allowed, apparently without any control, to display hideous advertisements, spoiling the rural character of the land. But, happily, there are indications that matters are changing for the better. As an instance of what can be done, take the beautiful road beside the River Wye between Chepstow and Tintern, which for some years past had been greatly marred by advertisements actually plastered on the rocks and ruining this stretch of typical English scenery. This was Crown property, and one of our more public-spirited members in that district wrote to the Office of Woods and Forests urging that this disfigurement should be discontinued, with the result that the Commissioners issued instructions to the lessee that it should be stopped.

The great oil firms, owing to public protests, have to a great extent withdrawn their unsightly hoardings from the fields, and at length, after many years of Parliamentary difficulties, the Advertisements Regulation Act of 1907 has been amended and this session has received the Royal assent. The new Act is the outcome of conferences between the Scapa Society and the advertising section of the London Chamber of Commerce, who acted for the great bill-posting organisations throughout the country, and it has been helped forward by the friendly sympathy of the Home Office, the Ministry of Health and the County Councils Association. In

order that the charm of country prospects may no longer be destroyed by the callous advertiser, it now remains for the local authorities to use their powers to their full extent and for country residents and wayfarers to urge action.

The thanks of the whole community are due to the Scapa Society for their unremitting efforts in this direction, efforts which have now been crowned with success.

It seems a pity that steps have not been taken by the Ministry of Transport to safeguard from the display of advertisements the great new roads that are now being constructed, for here there is an opportunity of making these highways, if free from hoardings, and with houses and buildings well designed and arranged on either side, unique in their dignity and beauty. More consideration should also be given to their junctions with existing roads, where splendid opportunities are being missed for fine traffic centres, planned with dignified buildings around them.

A tax on advertisements, as in France and other countries, would not only serve as a source of income to the State, but as a deterrent to many who advertise in a vulgar manner. The whole attitude towards this question is becoming more hopeful, and in years to come we may expect to see advertisements treated in a reasonably artistic manner.

Now when we turn to our old villages and country towns the position is not so hopeful. Too often we see villages, whose rustic character is their chief charm and attraction, being spoiled by new erections that ape the worst features of our city buildings and are intrinsically out of place. Yet all this is being done under the mistaken idea that progress is being made.

England possesses exquisite old villages and country towns, some of the most beautiful in the world. They are a unique and priceless heritage, the admiration and envy of all who visit our shores, that should be preserved at all costs; but it is no exaggeration to say that in half a century's time, at the rate so-called improvements are being made, the destruction of almost all the beauty and distinction with which our ancestors enhanced these towns and villages will be complete.

There are, it is true, the town-planning powers conferred on Local Authorities by Mr. John Burns. They have, however, been adopted but slowly, and as regards matters of amenity they



have been used and administered with far too much timidity. During the last Session of Parliament the statutes were consolidated in a new Act embodying the various amendments made since 1909. The general effect of these has been to simplify procedure and extend the scope of the original Act, while increasing the power of the Minister of Health to enforce its use.

It is to be hoped that the measure needed to extend town-planning powers to the built-up areas of towns, which the Minister has expressed his intention of introducing, will be passed into law at an early date, with any amendment found necessary to make the present Act effective as a means of preserving the pleasantness of the countryside.

It is essential that the members of this Institute and the public generally should support the extension of this beneficent work, and should insist on a vigorous administration of all existing powers on the part of Local Authorities and the Central Government.

In the carrying out of their duties under the Housing Acts, the various municipalities have a great responsibility. In many cases we see houses and layouts which are to be commended in every way, suitable to the district, of good local materials, comfortable, well planned and designed, and adding to the amenities of the countryside. Those which reach this standard are, unfortunately, the exception. Local Authorities, who since 1923 have been freed from much central guidance and control in such matters, are too often neglecting to maintain a decent standard of design in their housing work. Certain it is that, either for lack of proper control, or through want of care or designing ability, whole districts are being disfigured by small buildings placed promiscuously by the roadsides, built without the slightest regard to their position or the character of the site, of inharmonious materials and inappropriate design. I am not unmindful of the difficulties which at present beset building enterprise, and make full allowance for them, but I say that a people who tolerate without protest such disregard for appearance must have lost that sense of seemliness which is at the root of proper civic pride; one wonders whether they are utterly oblivious to their surroundings.

Our great railway companies are advertising the beauties and attractions of the towns and districts

served by their lines, and at the same time encouraging art by commissioning painters of note to design posters depicting various types of landscape charm; but what is the use of these efforts by the railway companies if the Local Authorities do not realise their responsibilities and allow buildings to be erected which are wholly out of harmony with their surroundings?

The acquisition of a piece of land should not give to the purchaser an immoral right to erect any building which will prove to be a disfigurement and an eyesore in surroundings of beauty and grandeur.

Our pictures and other national treasures of art are carefully housed, and entrusted to the care of experts to safeguard and prevent their being tampered with—pictures expressive of the centuries in which they were painted, but, after all, only seen and enjoyed by the comparatively few who can appreciate them. Our villages and towns, on the other hand, are seen by everybody and are a part of the actual life of their inhabitants, of the people whose taste is being daily formed by the environment in which they dwell. Yet the artistic care of villages and towns we hand over without thought to the safe keeping of those who have no qualifications for the work, and who, with the best intentions, lamentably betray their trust.

We build magnificent roads, we pave our streets and have the most efficient and up-to-date systems of drainage; we lay on water, gas and electricity and all that makes for the material comfort of life, and yet with all this we neglect the æsthetic side, the cultivation of the beautiful and all that gives real and lasting pleasure to those who dwell in the country. When we think that day by day all over England old buildings are being pulled down without protest, to make way for new buildings, the majority without the slightest beauty or fitness, it makes us marvel at our folly in allowing to be swept away the old work which tells the history and tradition of our country in every town and village throughout the land.

I feel we owe a debt of gratitude to the Society for the Protection of Ancient Buildings for the energetic action and protests they so consistently make against such vandalism. To what a state of apathy have we fallen in England to-day when we can allow without protest the gradual demolition of an old historical building like Warwick Priory, with all its traditions and associations, and the shell only to be rescued by an enterprising American

who is pulling it down stone by stone for re-erection in America, where it may stand as a lasting reproach to our crass indifference in parting with one of these irreplaceable heritages of the past. How truly did the late Lord Curzon write in his will that he was "convinced that beautiful and ancient buildings, which recall the life and customs of the past are not only historical documents of extreme value, but are a part of the spiritual and æsthetic heritage of a nation, imbuing it with reverence and educating its taste!"

It seems to be forgotten that throughout the country every district had up to the close of the eighteenth century and even later its own individual character and traditional methods of building, partly owing to the local material available. This gave a special and pleasing distinction to the countryside, and at a glance one could recognise the architecture of any part of England.

Now all this is altered. The introduction of railways changed to a great extent the local character of building, by enabling cheaper materials to be brought long distances to districts where they were unknown. The introduction of machine-manufactured joiners' and smiths' work has displaced the local craftsmen, and to a very great extent the enforcement of building bye-laws—necessary in towns and cities perhaps, but needless and foolish in a great measure under the different conditions of country life—have all contributed to alter village architecture; but as well the advent of the motor car, with its encouragement of restlessness and constant change of place, has not only been responsible for the change in country life, but has made people unwilling to spend money on their houses, or to make their permanent abodes of architectural value, cheapness having become the one object to be attained.

Think of our old villages to-day in every part of the country, with the constant succession of motor cars streaming through as if on business of life and death, their occupants regardless of the comfort and quiet of those who live there and not even troubling to look at the buildings they pass by. Speed and yet increasing speed seems to be the sole object and everything apparently has to give way to this.

The policy of the new road makers apparently is to sweep away everything that stands in the way of speed: the winding picturesque lanes and roads are widened and straightened, miles of unnecessary

concrete curbing are laid on either side of the old grass-bordered highways—for paths that have never been needed in the past—magnificent trees are cut down, corners are rounded, and frequently the entrance to villages vulgarised by oil pumping stations and advertisements, so as to enable greater haste to be achieved by the motorist.

Can it be wondered at that all regard for old buildings or villages is in danger of becoming a thing of the past?

I should like to quote here some recent words of Professor Lethaby, who truly says, "The England that we love is the England of old towns, tilled fields, little rivers, farms, churches and cottages. If by violently marring the fair country and vulgarising the shy old buildings, we obtain so much less to love, what shall it profit? Without an England to love we cannot remain stout of heart and enduring. Civilisation cannot be had merely as a word—it rests on foundations."

I am sure the majority of people deplore the changes to which I have referred, changes taking place so rapidly, but a united and systematic effort on the part of architects and Local Authorities might do something to preserve the still remaining charm of the country.

In certain towns and districts there might be formed small Civic Committees, annually elected by the ratepayers, whose duty it would be to try and foster wider interest in their localities, their historic traditions, their romance, and their architecture. They would enter on their task, not in any spirit of fussy interference, or the pushing of fads, but helpfully, with suggestions and advice. The functions at first might be only advisory, but they would in time set up a sort of commission to which it would be a privilege and honour to belong. The annual elections would ensure that the work did not get into a groove, and the members would have no self-interested motives.

On every committee there might be an architect, selected for his knowledge of the architecture and traditional buildings of the locality, and care should be taken to elect if possible only those who took an interest in their town or village, and were actuated by a sense of civic pride. In case of any matters of importance power should be given to call in the Commission of Fine Arts to give counsel.

This may sound Utopian, but there are already



many societies of this nature, acting without elected authority, who are doing admirable and most helpful work in Birmingham, Newcastle-on-Tyne, Norwich, Stratford-on-Avon, Coventry, and other places.

At first the establishment of such committees might be regarded with suspicion, any interference with the liberty of people would be resented, but if it were felt that the advice was purely for the general and artistic welfare of the place, their help would in time not only be respected, but invited.

We realise that changes must take place, the constant stream of visitors and trippers brought in cars and charabancs to our villages and out-of-the-way corners of England are all destroying their old-world charm and last vestiges of remoteness—but these changes would modernise them more harmoniously if carried out under careful and sympathetic guidance.

We have surely passed the time when it is said "What is the use of calling attention to such things, they will be done whatever protests are made and we must accept them"—but why should we? Great changes and improvements are taking place every day, societies are springing up for the promotion of objects unheard of years ago, the tidying up of our towns and villages, the prevention of litter and rubbish, and all matters tending to familiarise our people from their childhood with

ugliness and disorder and vitiating the taste of the entire nation.

Many may say these things are too trivial to speak of—not worth the attention of a great Institute such as this—but is it really so? Are we not, as architects, all keenly interested in the welfare of our country, in its beauty, its buildings and everything that makes it more attractive, more wholesome and more joy-giving?

At the present time architecture and decorative building, town planning and schemes for housing are engaging the careful attention of all nations, and it is for this Institute to show, by the work of its members, that it stands for England in the forefront of this movement.

Architecture is everybody's business, and the public have the strongest possible interest in being served by a competent body of men. It is essentially a social matter and the unqualified or unskilful architect may do something far worse than waste his client's money. He may be inflicting irreparable damage on a beautiful site, or marring an otherwise harmonious street and so injuring the work of others with more artistic vision.

It is for members, therefore, of this Royal Institute of British Architects to realise the responsibility that rests upon them and to devote all their powers and skill to the "advancement of Civic Architecture."

## Vote of Thanks to the President

Sir FRANK DICKSEE, P.R.A., in proposing a vote of thanks to the President for his address, said: There are two strains that I find running through the President's address: one is that of the artist, the other that of a man who loves his country; and to have these two qualities united is, I think, a source of great satisfaction to you who have placed him in this honourable position.

The President has covered so wide a field that it is impossible for me to follow him, but I should like to say a few words about the education, not so much of the profession—because that is now in good hands—but the education of the public. For good or ill, this is a democratic country, and it is desirable that we should educate our masters. We have been told that, I think, by statesmen of authority. Therefore, if anything can be done to extend the knowledge of architecture—and I see signs of it in many directions—by the publications which are issued and by the societies that are formed, the time will soon come when

a better knowledge of architecture will pervade the people of this country.

Another part of the President's address which also interested me—and which I am very glad he touched upon—is the crying evil of outrageous and vulgar advertisement. We suffer from it badly in London, but we are even more tried when we see it in the country. In London, I am afraid, we get hardened to vulgarity; but we can escape it—and there is no place like London to leave. We want to go into the country for a little rest and a little pleasure, but even there we are assailed on every side by the evil we have tried to escape. All the new inventions that have been made for our convenience, and for the profit of those who make them, are answerable, I suppose, for this state of things. I am glad to find that something is being done to get rid of the evil. I am told, for instance, that certain companies have given instructions for their posters to be removed from places where they have become an offence to the people. I re-

member, some years ago, finding myself in the neighbourhood of Southampton Water, and I found that the whole of this large spread of water, very beautiful in many parts, was dominated by an enormous enamelled iron board, with lettering quite as long as this room, advertising somebody's oats. The effect that that advertisement had on me—I hope it had the same effect on others also—was that I gave strict orders that those oats were never to enter my home. The suggestion has been made by the President—and I cannot think, for the life of me, why it has not been adopted—that there should be a taxation on advertisements. I quite see that it would lead to difficulties in many ways if you carried it as far as newspaper advertisements; but if you limited the taxation to posters, it would surely be an easy matter to arrange. In other countries advertisements are taxed, in some cases heavily taxed, and nothing is more easy than to collect this tax, because it is done by means of a stamp. If an advertisement is seen without a stamp, he who placed it there is prosecuted. We are casting about for fresh means of taxation which would not injure the community: here is a method which would benefit the community. Why not adopt it?

I always feel a little diffident when talking about architectural matters. I know I am to be followed by one whose knowledge of his profession is profound, and whose manner of imparting it to others is most interesting. In proposing this vote of thanks to the President, I do so in the most cordial way, and I am sure the advice that he has given will sink into our minds, and we shall try, each in our little way, to act according to it.

Sir REGINALD BLOMFIELD, R.A., in seconding the vote of thanks, said: I have much pleasure in seconding the vote of thanks to the President and in doing so I congratulate him on having attained the highest rank in the profession after long years of devoted service to the Institute. His energy, his organising ability, his urbanity and his ready sympathy will, I am confident, carry him successfully through the onerous duties and responsibilities of the President of the R.I.B.A. He has given us to-night a very suggestive address and has touched on matters which are of interest not only to architects but to all educated people. In regard to ourselves he has pointed out that the hatchet is at length buried and the rift closed which has divided the ranks of architects for two generations. The Institute can now go forward with the work to which it dedicates itself, "*Usui civium decori urbium*," and the condition of its doing so is that its members should pull together. I do not mean for an instant in the sense of a Trade Union; what I refer to is team-work, the feeling of honourable obligation to work loyally with others, even at the cost of personal sacrifice and the loss of personal advertisement. I have noticed since the war a growing

tendency among the younger brethren to indulge in caustic criticism of the work of their colleagues. I am not referring to what we all say of each other among ourselves but to deliberate criticism delivered in public and addressed to the public. The excuse given is that it is necessary to educate the public. Of course it is very easy to make mincemeat of the efforts of one's neighbour, and it is an agreeable pastime, because it gives the critic a sense of power and enables him to remove some of his neighbours' landmarks, but I would suggest that this criticism is seldom based on adequate knowledge. The educated public is not so ignorant of the difference between good and bad architecture as to require to be spoon-fed and the proceeding appears to me to be unprofessional and is certainly unsportsmanlike, and this last ground is, I think, its final condemnation. If dirty linen has to be washed, the proper place for the operation is the back office and not the open market. The president suggested a tax on the advertisements that disfigure our buildings and our countryside: the blaze of vulgarity at Piccadilly Circus, for example, the gigantic wooden cows that disfigure the fields, the humorous tradesmen painting each other's backs. I hope this suggestion will be followed up. These advertisements are a source of annoyance to the great majority of the community, and the advertisers ought to compensate the community for this annoyance by further contributions to the revenue. I should like to see the tax extended to organised advertisement in other quarters, but I fear this is too elusive and subtle to be within the range of practical politics.

The President devoted most of his paper to a plea for the preservation of the amenities of our towns and countryside and here his appeal is not only to architects but to the public. I am wholly with him in this. A great deal has been done to direct attention to the preservation of valuable buildings and scenery, and much has been done by this Institute, the Society for the Preservation of Ancient Buildings and the National Trust, and I may refer particularly to the admirable work done by the Ancient Monuments Board of the Office of Works, but there is a long lee-way to make up. Not only do people still regard buildings later than the end of the seventeenth century as of little or no interest, but the public has not yet learnt to regard great architecture as great art, as great as the masterpieces of painting and sculpture, not less entitled to preservation and protection than they are. We have at this moment a case in point which is causing many of us the most profound anxiety. I refer to Waterloo Bridge. No one would think of allowing the most eminent of sculptors to remodel Stevens' Wellington Monument, or the most skilful of our painters to repaint Titian's Bacchus and Ariadne. Yet Waterloo Bridge is in danger of either destruction or mutilation. Waterloo Bridge is, I believe, the finest bridge ever



built. The President of the Institute of American Architects, in expressing an earnest hope for its preservation, rightly describes it as a "Truly National Monument." In the opinion of all competent artists it is a noble piece of monumental architecture and I maintain that on this ground it is as much entitled to be preserved, unaltered, as any other great work of art. Really great art, whether it is in architecture, painting, or sculpture, is a priceless possession and should be absolutely inalienable, because any one generation is a trustee of it for the generations that follow. Waterloo Bridge is with St. Paul's a vital and essential feature of London, and what will future generations think of this, if it allows this splendid work to be destroyed or tampered with in any way by anybody? I hope this Institute will continue the strenuous effort it is making to save the Bridge.

In regard to the countryside the President speaks with the authority of one who knows it intimately, and I am glad he quoted the beautiful description written by my old friend W. R. Lethaby, who has the knack of hitting the nail on the head just where it is wanted. The England that we love, that our people have fought for and will fight for again, is the England that he describes, not the England of the motor-car and the bungalow.

The problem of road planning is, of course, a difficult

one. Just now it is much in the air. Town planning, road planning, regional planning, arterial roads, zoning and the whole box of tricks have become for the time almost a fetish. I do not underrate the importance of these matters; they require very close consideration, but they are only a part and not the whole of the problem of modern civilisation. The Ministry of Transport, which has to consider it from many points of view, has shown a most welcome recognition of the monuments of the past, but this attitude would be greatly strengthened if the public realised that if everything is to be sacrificed to the motor, the charm of our English countryside, absolutely unique as it is, will be lost. We don't want the whole of England Haussmannised. The President's protest and appeal comes none too soon and I have much pleasure in seconding the vote of thanks to him for his excellent address.

The vote was carried by acclamation.

The PRESIDENT: Ladies and gentlemen, Sir Frank Dicksee and Sir Reginald Blomfield,—I thank you very much indeed for the kind way in which you have proposed, seconded and accepted this vote of thanks. I have, I admit, thought a good deal about this paper, and it is a very great pleasure to me to feel that it has interested you in hearing it.

## Unveiling of Mr. Gotch's Portrait

The PRESIDENT: I have now, as the incoming President, one very pleasant duty to perform, and that is to accept, on behalf of the Institute, and to unveil, the portrait of our past President, Mr. Gotch, so that this picture will be added to the excellent collection of portraits which we are rapidly accumulating in the Institute premises. It is peculiarly interesting this year because the portrait has been painted by the well-known artist, Mr. T. C. Gotch, our late President's brother. He, as you know, is the President of the Royal British Colonial Society of Artists, and I am sure that when you see this portrait you will really congratulate him upon the admirable way in which he has fulfilled his task.

It is very difficult for me to speak of Mr. Alfred Gotch in his presence, but, as I have known him for a very great number of years, and have had the pleasure of sitting on the Council with him for almost an equal number of years, I am as well privileged, I think, as anyone in this room to speak of him. Mr. Gotch has made a most admirable Chairman; he has conducted the affairs of the Institute in a firm and fair manner, and his treatment of difficulties has been judicious and sound. But this was only to be expected from a man like Mr. Gotch, who for years

past has been so conversant with public life in his own county. Mr. Gotch, apart from his work as President, will always be known for the wonderful series of books that he has written upon Renaissance Architecture in England. In fact, he was in modern times one of the great protagonists in that movement, the author of many admirable works which have now become classics in architectural literature. We hope that in his well-earned leisure—and he is blessed with perennial youth—he will be able to find time to continue his labours; and I might mention that even during his years of office he found time to write a work which has been only recently published.

It gives me very great pleasure to unveil the portrait of Mr. Gotch, and in doing so I should like to move a vote of thanks to Mr. T. C. Gotch, the painter of this picture.

Mr. J. ALFRED GOTCH (in reply) said: I only wish it were a fact, as some kind critics have observed, that this was "a speaking likeness"; it would then save me from the difficult task of replying to what the President has been so kind as to say. I never felt more keenly the emotion which filled the poet when he exclaimed: "Oh that those lips had language!" But they are inarticulate, to your great



THE AUCTIONEERS' AND ESTATE AGENTS' INSTITUTE, LINCOLN'S INN FIELDS  
 Architects : Messrs. Greenaway and Newberry  
*Awarded the R.I.B.A. Medal for the best London street frontage, 1924*



loss, because I am sure you would be much better pleased to hear these painted lips talk than to hear me. As that is the case, I can only say that Mr. Dawber, with his usual kindness, has overstated the case. Really, it is not what concerns me personally that will interest you to-night, but the counterfeit presentment which you see before you. It has been submitted to the criticism of many relatives and also to my fellow townsmen, and as most of them admire it, sometimes qualified with some sort of suggestion, I would only observe that those suggestions are nearly all different, and so there is not a very unanimous feeling that there is something wrong about it. As it has passed those severe tests, I think we may consider it to be a fairly good portrait. With one criticism, or observation,

I may made by a kindly young relative I do thoroughly sympathise. "It is a very nice picture," he said, "but it is not handsome enough."

Mr. T. C. GOTCH: I need hardly tell you that I am in a very embarrassing position. I accepted your kind invitation with reluctance, but I never anticipated that I should find myself between my brother and his "counterfeit" resemblance. It reminds me of a well-known saying in which, I think, there is a reference to the devil. However, I must thank you very much, Mr. President, for so kindly moving this vote of thanks. The only thing I need add now is, that I do not know who the young "relative" is to whom my brother referred, but I cordially agree with *her*.

### Presentation of the R.I.B.A. Street Architecture Medal

The PRESIDENT: I have still one more duty to perform to-night, and that is, to present the Royal Institute Medal and Diploma to the architects of the best London street frontage carried out during the year 1924. The building selected by the jury this year is the Auctioneers' and Estate Agents' Institute in Lincoln's Inn Fields. I think you will agree that the jury have made a very good decision, and have selected a very admirable building. If anyone in this room has not seen it, I hope he will take an early opportunity of doing so. It is extremely dignified, simple and quiet in its treatment, frankly based on eighteenth-century tradition and, I think, eminently suited for its purpose. And in congratulating the architects, Messrs. Greenaway and Newberry, upon their most successful effort, I should like to congratulate also the members of the Auctioneers' and Estate Agents' Institute upon the beautiful building in which they are now able to conduct their work. We have with us to-night, as representatives of the Auctioneers' and Estate Agents' Institute, Sir William Wells, a past-president, and Mr. E. H. Blake, the secretary, and Mr. F. May, a director of Messrs. Holland, Hannen and Cubitts, the builders of this admirable building.

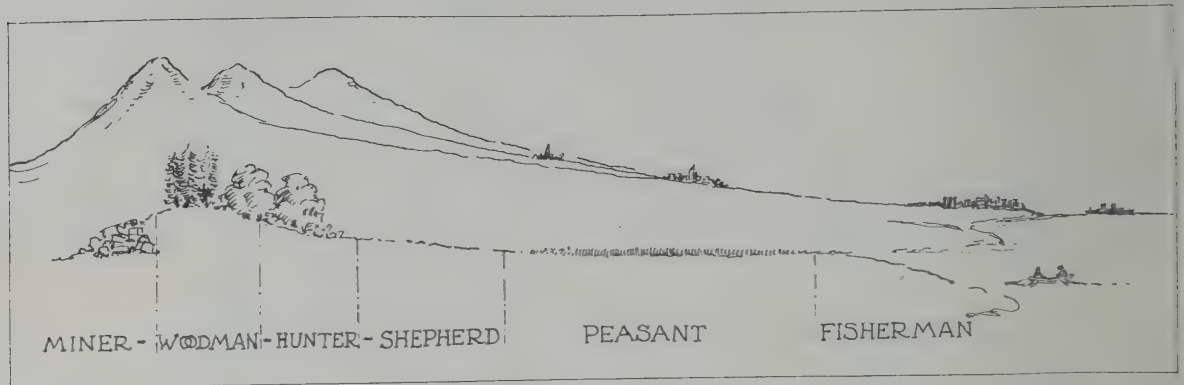
The President then handed the Medal and Diploma to Mr. Greenaway.

Mr. F. H. GREENAWAY [*F.*] (in reply) said: I do not know whether we were more pleased than surprised when we heard of the honour we were to receive, because

I may confess that though Mr. Newberry and myself have been in practice in London for more years than we care to remember, our work has almost entirely been outside the four-mile radius; and I believe that the Auctioneers' and Estate Agents' Institute is the first building we have designed that may fairly be called London street architecture. We do not make the mistake of thinking that we have produced anything very startling or original; indeed we did not try to do so, we aimed at housing the headquarters of a professional body in a dignified manner. This medal, I understand, is awarded for the exterior of a building. I confess I am unable to think of a building except as a whole. We certainly gave as much thought and time to the interior as to the exterior, and I do not think the interior will suffer by comparison. Our work in connection with this building was an exceedingly happy experience from first to last. Unlike Mr. Verity who received the gold medal last year, we had no serious economic problem to deal with; we were not faced with difficulties of commercial considerations, and we had an excellent site in one of the finest and most interesting squares in London. We had a most considerate and capable committee to act for, and in Messrs. Holland, Hannen and Cubitts as good contractors as architects could wish. His Royal Highness the Prince of Wales honoured the building by formally opening it, and now, to crown all, we have received this medal at your hands. I cannot think of a happier termination to an architectural undertaking.

# The Sociological Basis of Architecture

BY STANLEY C. RAMSEY [F.]



QUITE recently I heard one of the most distinguished of our younger poets open an address with the remark that at the present time "All art was hag-ridden with theory." So far from disputing his dictum, I would like to add that not only is all art at the moment being tested with the fire of applied theory, but, that in a period of uncertainty such as the present, it must inevitably and rightly be so.

I propose, therefore, this evening, with your permission, to indulge in a regular orgy of theory, and if I cannot carry you with me the whole way, I hope at any rate to interest you in some, if not all, of my assumptions.

It is almost risking a platitude to say that without a theory one can accomplish nothing—a theory held either consciously or unconsciously, but probably the more effective as it is instinctive rather than adoptive. Without a theory of navigation, anything but the simplest voyages would be impossible.

To those of you who have made a study of modern sociology much of what I am going to say will, I am afraid, be rather stale and unprofitable. But in spite of the risk of boring you I propose to start at the very beginning, and for the first part of my paper to concern myself with a few simple elemental types and the inferences to be drawn from a study of them.

If you take a section of almost any coast from West to East, or from one side of a mountain range to the flat land beyond, you will find such a typical section as is shown on the diagram.

Now if we examine this section as it would be inhabited in primitive times, we shall discover that certain people inhabit certain parts according to the existence or occupation afforded by the different terrain. Thus, on the steep western or sea side, we have the miner who in early times before the days of deep shafts worked on the side of the hills or mountains nearest to the deposits. It will be easily seen from the diagram that stone and metals are more easily reached from the steep than the flatter sides. Further up the hill side, where the coniferous forests commence, we find the woodman. Next, where the forest opens

on to the grass uplands we have the hunter, and then, continuing down the flatter slopes, we discover first on the grassy uplands the shepherds; then, where the grass gives place to the richer alluvial lower grounds, the peasant or farmer—the poor farmer on the upper slopes and the rich farmer in the plains. Then, where the river widens into the delta we find the last of our primitive types—the fisherman. Thus, starting from left to right on our valley section—only a typical section be it remembered—differing in details in any particular place selected, we have the miner, woodman, hunter, shepherd, peasant and fisherman—our six elemental or primitive types who form in their manifold occupations and developments the basis of our modern civilisation. From these types and from the country which they inhabit, we can discuss the first and most important of Le Play's formulæ:

Place—work—folk.

That is, the place determines the work and the place and work determine the folk or people. For instance, where there is grass sheep can be grazed, and the work of shepherding developed, or in the terms of our formulæ:

Grass—care of sheep—shepherds,  
or

Corn land—farming—peasants.

But we might stop now for a few minutes to consider who Le Play was, and what was his theory.

Le Play was a French mining engineer who eventually held an important position in the École Polytechnique, Paris, where he was Professor of Mining Engineering. He was born in 1806 and died in 1882. In his spare time he made a study of the lives of various working families in different parts of Europe—in fact, he devoted the whole of his spare time in a long and busy life to such a study. He made comprehensive notes on some 300 European families and published the result of his labour in a monumental series of six volumes entitled *Les Ouvriers Européens*. From these volumes is derived the theory of the valley section and the six elemental types, which may be said to form the basis of all modern sociology.



## CHANGE OF OCCUPATION.

Le Play had many followers and disciples, one of the most important of whom was Demolins, who wrote a book entitled *Comment la route crée le type social*, which was in effect the application of Le Play's theory or theories to the wide problem of racial development and distribution of peoples over the whole of the known world.

A little anecdote of Le Play will explain his particular point of view.

Once when he was addressing his class in the Paris Polytechnique he asked them what was the most important product that came from the mine. After listening to the various answers, which ranged from diamonds and gold to coal, he answered his own question by saying "The miner."

Perhaps the best method of explaining Le Play's theory is to relate a story of Goethe, the German poet.

Goethe was examining a tree in the Botanical Gardens of Padua, and was struck by the fact that the peculiar structure of this particular tree was manifested in all parts—i.e., in its roots, its trunk, leaves and flowers. Applying this theory to the theory of human development and organisation, Le Play discovered that the same traits are manifested throughout any particular section of society. Or, to be more explicit, that if a society, as ours was from the close of the Middle Ages up to the beginning of the nineteenth century, be based on agriculture, then the whole of that society would be dominated by the peasant in his elemental and more complex types. That there would be a corresponding relationship between the most simple land worker and the King or Head of the State in such a society.

We shall see how this theory applies when we come to the consideration of the more complex states of civilisation and the buildings or architecture such civilisation produced.

In order to arrive at the development from our six elemental types of miner, woodman, hunter, shepherd, peasant and fisherman, we must next consider how each of these types would develop as society itself grew and developed. Taking them in order, we have first the miner; and we must first consider the miner as he existed in more remote days and in earlier civilisations. As a salt miner we find him on the barren seashore, and as a surface miner and quarryman on the short sterile side of the mountain slope. Remote from the more populous centres of the fertile agricultural plains he has always been something of a barbarian. Harsh in his manner of living and unsociable from his remoteness. He with his fellow workman and nearest neighbour on our valley section, the woodman, have had much in common. They are the servants of the community and particularly of the building community. "The drawers of water and the hewers of wood." It was the miner who made the first iron axe-head to be fitted with the woodman's handle; the miner who sheathed the wooden cart wheel. Both these vocations have from the earliest days of civilisation been associated together in building. Now, remembering the discovery as to the similarity of all parts of the plant, we shall begin to see how vastly important are these social differences as they affect our modern civilisation.

If Le Play's deductions are correct, and I submit that they are, then there is a similarity of outlook and character

between the most humble coal miner or steel worker and the greatest railway magnate or coal lord.

A student of architecture, especially in this country, is apt to be bewildered by the seeming continuity of design up to the end of the eighteenth century, and the seeming lack of continuity during the nineteenth, but as I shall hope to show during the course of this paper, such breaks in tradition have always occurred with the changes in vocation.

As mining developed and surface mining was superseded by tunnelling, and then by deep shafts, the miner became more and more removed from his fellow beings in contradistinction to the followers of all other vocations. As civilisation developed, the members of all other vocations except the miners tended to become more closely knit together. The miner became not only more removed, but more violent in his likes and dislikes. His sudden change from darkness to light, the special and separate nature of his work, making organisation difficult, all tending to develop a special type of character, which will, I think, if we examine it with its implications, go far to explain the peculiarities manifested in the social structure and architectural developments of the nineteenth century. I shall have more to say of the miner presently, but for the moment we will leave him and give a few minutes' consideration to his companion, the woodman.

In all northern countries wood was originally, as it is now over large areas of Russia and Sweden, the chief building material, and the woodman, first as a rough logger and timber feller, afterwards as carpenter and housewright, became one of the chief workmen or master builders.

Even to-day it is interesting to notice how many of our successful builders started life at the carpenter's bench. The woodman, through the nature of his work, became a cunning contriver in the use of supporting or framed members. At first a few rough tree trunks tied together—the primitive hut (which must have been something like the log cabin of the timber districts in modern Canada) afterwards to develop into those intricate and glorious half-timbered houses of which you have some very fine examples in Lancashire.

Even to-day, in spite of our steel and concrete, the woodman as carpenter or joiner is not without his importance.

Following the woodman, we have next a very different type, the hunter—the man who deals in death, and who by a natural transition becomes the soldier, the chief, the leader. He organises the valley for war, and the whole influence of civilisation is bent on turning his faculties towards peaceful ends. In the Great War—a war in which cavalry played so small a part—it is interesting to note how many of our great soldiers were cavalrymen. As a type the hunter, as civilisation spreads over his hunting fields, must either become a warrior leader and form a soldier aristocracy, as were, in fact, in the early days most of the aristocracies of Europe, or he must die out as the Red Indian is dying out.

In the history of building the hunter is important as a soldier who thinks in terms of fortresses, or as a chief who becomes a patron.

Immediately on the grass land and linked to the hunter in our valley chain is the shepherd—his exact antitype—





I now propose to deal with the recognised historical divisions of English architecture and to attempt to show how these periods were influenced by the different vocational types. In this respect I wish to guard against a modern prevailing error of explaining everything by some simple and over-riding theory. Life is not as easy as all that, and in considering any period there are so many factors that must be taken into consideration—geographical and historical, climatic and racial, with cultural influences from other nations, so that this vocational theory can be only taken as a contributory influence, which when considered with all these other factors may help to explain certain difficulties and incomprehensibilities in our architectural development. The interest in the theory of vocational types is that it is basic, the influence of which has to a large extent, at any rate in technical history, been neglected.

I propose to divide the architectural history into three periods :

- (1) The historical period ;
- (2) The industrial period ; and
- (3) The period of organisation.

#### HISTORICAL PERIOD.

Passing over the influence of the Romans and Saxons I will, if I may, commence with the Normans, whom I am going to describe as the "Hunters." By this I mean that they were essentially, not in the simple sense but in the complex sense, a hunting-warrior type. They were, of course, as we know, originally seafaring people with an agricultural tradition, but owing to the necessity of their expansion they came more and more to depend upon the sword for conquest and settlement.

Now, taking them as the hunter or warrior type—and when I am speaking of types in connection with historical periods I mean the dominating type at that particular period—we find that throughout the whole of the Norman civilisation importance is given to the soldier. He thinks in terms of war, his relaxation is the chase, his attitude towards all building is that of the soldier to the fortress—and this we find true not only of the buildings of war but of the buildings of peace.

It is commonly said that Norman church architecture was built on particular lines because of the necessity of defence, and although this is to a certain extent true I do not believe it is entirely true, but that it is rather the attitude of mind which, continually thinking in terms of fortresses, can only build according to those terms. Therefore, throughout the whole of Norman architecture we find enormous strength, small apertures, every line and stone of which expresses this principle of defence.

Probably the most indicative characteristic of any people is their attitude towards human life, and it is interesting to trace how particular offences punished by death were peculiar to certain periods. The Norman law of death for offences against the Game Law—essentially a hunters' law—was maintained in its extreme form until the passing or suppression of the Norman spirit by the ever-increasing power of the Church. I think it was Archbishop Langton who finally did away with the death penalty for offences against the Game Laws.

Passing from the Norman to the mediæval or Gothic period—which may be said to have commenced with the

murder of Thomas à Becket and the submission of the King to the Church—from this time the Church grew far more powerful and was, in fact, the dominating factor, and this period I propose to call the "Shepherd" period.

As we have seen from the study of our original types, the shepherds with their hatred of death had obviously to rely on the strong arm of the hunter or soldier for defence and the maintenance of order, and it is interesting to note that when Joan of Arc was condemned for heresy Mr. Bernard Shaw, with his historical accuracy, makes the military power the executioners who carried out the death sentence.

So, from now onwards, we get two powers both struggling for mastery—the temporal and the spiritual—and I think, at any rate in the beginning of the "Shepherd" or Mediæval period, the whole weight of the Church was bent on controlling and guiding the soldier spirit of the Normans to the service of the Church. They turned them into Crusaders and sent them off on holy wars, and they developed the tournament and the spirit of chivalry.

One crime a shepherd cannot forgive, and that is the loss or theft of his flock, as, of course, his flock is vital to him in his primitive state. So that we find in the transmuted state the one unforgivable crime was heresy ; and as the hunter imposed the death sentence for breaking the Game Laws, so the Churchman imposed the death sentence for heresy, which was enacted in varying force until what may be described as the end of the shepherd period—i.e., the disestablishment of monasteries under Henry VIII. (The law against heresy was revived under Mary, but only to a limited extent.)

Now, as I have said, the shepherds are not essentially a building people—they think in terms of life and growth, and their riches are due to the expansion of their flocks. So behind all the wonderful beauty of the Gothic churches and cathedrals is the unfolding of the forest glade—it is essentially the architecture of the grove and the sheepfold. The cloisters and the college quad are the more permanent expressions in stone of this simple idea, whilst throughout all the periods of Gothic we feel the influence of the forest with its branching aisles, until with its final phase, i.e., the perpendicular, we get a feeling as if the building were really petrified wood. Their ideas of building were dynamic and not static as that of the Norman ; they thought in terms of groin and panel, rather than in the terms of simple arch and column. There is even in the finest of the Gothic buildings beneath its wonderful poise a certain insecurity—a fragility of structure.

Mr. Hilaire Belloc, that impassioned admirer of the mediæval period, states in one of his books—I think it is in his *History of Paris*—"that contemporary with the erection of a Gothic Cathedral is the builders' repair shop at its base."

I am not in any sense trying to decry the beauty or the achievement of Gothic architecture, but am trying to point out the essential differences between that and preceding and subsequent styles.

The chief building material both for the Norman and mediæval work is stone and timber—the work of the quarryman and of the woodman, and it is not until the advent of Henry VIII that we get any general use of brick.

Stone, of course, was quarried from the hills and from

the uplands, the natural territory of the hunter and the shepherd; whereas, when we come to brick we, of course, have the clay of the plains, the territory of the peasants.

If I am allowed to take Henry VIII as a figure which represents a new epoch, the closing of the shepherd period and the beginning of the peasant, then we really come to the Renaissance—or, as I should prefer to call it for the purposes of this paper, the “Peasant” period.

Whereas the Norman warrior depended on his sword for his domination, it was during the mediæval period that wool was the staple industry of England and from which our wealth and commerce came; but from the breaking up of the monasteries in the reign of Henry VIII, agriculture becomes our staple industry and continued to be our most important vocation until the repeal of the Corn Laws and the advent of the Industrial age.

Now it must be remembered that although we can, if my theory is tenable, for the purpose of convenience, roughly divide these periods as Hunter, Shepherd, and Peasant, we must remember that they were only the dominating types, that it did not mean that when, for instance, the Church became more powerful than the warriors did not exist as a very powerful and official caste, or that when agriculture and the peasants became increasingly more powerful that the system of Norman aristocracy and Church leadership was immediately superseded. They existed contemporaneously, but the indicative and important type is always the dominant type. As it will be found through the study of history, it is the dominant type that imposes its ideas on the other types, and essays to bind and mould them to its will.

Following out the law of life, we find that as death for offences against the Game Laws was superseded by the shepherds, so death for heresy was superseded by the peasants, who were rigorous in their application of the death penalty for all crimes against property. In fact, it was well into the nineteenth century that people were hanged for stealing a sheep or a loaf of bread.

When we think of peasant civilisation we have to think of the farm—the unit of centralised authority from which the farmer exercised his domination over all his lands, and we find, from the period of Henry VIII and the corresponding period of Francis I of France, that the whole effort of the Kings of both countries, as being the most representative of the people, was towards this centralisation of authority. It was the basic idea of peasant civilisation, and this is why it seems to me that the revival of Roman architecture and Roman methods of building, which we call the “Renaissance,” was so welcomed by the peasant mind of that time. Because it must be remembered that the Romans were essentially a nation of peasants or agriculturalists. It was the habit to think of them as soldiers, but they were only soldiers in a secondary degree; their purposes were not so much conquest—which was the policy of the Huns—but colonisation, settlement, and the encouragement of husbandry. As I have said, from now onwards, brick, the material of the peasants, becomes of increasing importance, until, well on in the Renaissance, we find brick the chief building material, so that even our most magnificent buildings of this period are for the most part brick buildings with stone facings.

London, so great a part of which was developed during the agricultural or “peasant” period, is essentially a city of brick. But as I have said, we come of a sailor people, therefore the idea of transported material and transported ideas of building are always observed as a controlling factor in our architecture. It has been said that the poverty of our designs and our buildings, particularly of our ideas, which characterised the early part of the nineteenth century and marked the closing of the Georgian era, were due to the long Napoleonic wars with France which shut us off from contact with the Continent.

It is interesting to trace the effect of the peasant mind in its relation with the soldier and the Churchman—the peasant, as we have seen, is the peaceful type, and his idea of an army is for defence, so that from the time of Henry VIII onward we have in our history as an outstanding fact our objection to a strong standing army; whereas the Church tends to become more and more formalistic until, at the end of the eighteenth century, we find the “Hunting” and “Sportsman” parson more concerned with the farming of his glebe lands than with the care of his flock. It would seem at first thought a very wild assumption to say that buildings such as Versailles or Castle Howard were nothing but glorified farmsteads—the analogy is at first sight so far fetched as to seem almost ludicrous, but the peasant with his life of peace and ease, as he accumulated riches, became ever more enamoured with magnificence and grandeur, and with his strong passion for centralisation we see gradually evolving those well-recognised types of Renaissance buildings with their central blocks, wings and subordinate groups. So that we have the hunter building his fortresses, the shepherd imitating his forest glades and erecting his sheepfolds, and the peasant developing his farm into country house and town palace.

This aspect of my subject and comparison with the different periods could be developed indefinitely, but I must now pass on to the Industrial or “Miners” period, which for the purposes of an easy classification may be said to commence from the repeal of the Corn Laws and to have continued down to the present day; though I should prefer to divide it into two periods—the one which I will call the “Mining Camp Period,” and which I will say ended in the closing years of the nineteenth century, and the other the “Modern Period” or the “Period of Organisation.”

As a matter of fact, of course, the Mining or Industrial Period commenced well in the middle of the eighteenth century, but it was not really until the miners were strong enough to repeal the Corn Laws that they can be said to have become the dominant type.

First of all, taking their attitude towards the laws of life, which, as I have said, I consider one of the most indicative, we find that during this period practically the only crime that was punished with death was the crime of murder (though occasionally and at rare instances the crime of high treason was punished in the same way). It was in fact the crime against the group, for the miner depends for his wealth upon his group multiple. As a primitive occupation one miner can only accumulate by his individual efforts a certain amount of wealth, but by the aid of his sons and his relations he can, as a group formation, accumulate and control a largely increasing amount of



wealth, so that the death of any member of his group is, in effect, a threat to his means of life. It is interesting to trace this idea of group formation developing and increasing during the period of the industrial era. The private employer is superseded by Boards of Directors, employers and employees combine and strengthen themselves into opposing groups, and although during the early part of the industrial period the individual counted for so much, this was only a passing phase, until to-day it is really the group formations that are the chief factors in our civilisation.

The miner was, of course, more than any other type dependent upon the sailor for his means of sustenance. After the repeal of the Corn Laws bread had to be imported, so that with the enormous increase of our urban and industrial population there was also an enormous increase in our maritime or carrying power.

The early mining or industrial development took place with such rapidity that the miner, with his remoteness and aloofness from the traditional and permanent ideas of the peasant, involved us, for the better part of 100 years, in what may be called a "Mining Camp" civilisation.

We architects all know too painfully well the chief characteristics of the buildings of the nineteenth century, commencing with the miners' towns, as, for example, the ribbon towns in Wales where we get what is really a translation of the miners' shack into terms of brick. In the older established industries, such as that of the Wedgwood Works in Staffordshire at Etruria, we find traces of the Georgian or Peasant civilisation carried on and expressed in their buildings; but quickly the architecture became more impermanent, all traces of tradition are lost, and small villages and country towns developed into huge, vast, formless conglomerations; until from sheer necessity we get the intervention of bye-laws and the enormous growth in the power of Poor Law authorities.

Possibly the most outstanding buildings of this period are the typical buildings of all mining camps—viz., the gin palaces, and corresponding with these are the gambling saloons, gambling probably being the greatest vice of the Industrial Age.

As opposed to the preceding or peasant period, we find impermanence and instability opposed to the ideas of permanence and stability. It was not until the advent of the Great War, which by the harsh stoppage of all building works put a stop to our fugitive and temporary view of housing, that existed not only amongst the working classes, who were possibly bound by conditions of work and place. Amongst the middle classes we find this attitude of impermanence expressed in movement—the taking of a house from three to seven years, and then moving on to another similar house. The whole population was in a state of flux and movement, very analogous to the conditions that obtained in the mining and pioneer camps of America, the constant movement of population from one part of the town to another, or from one township to another.

Again, as we have seen, the material of the period—stone for the hunters and the shepherds, and brick for the peasants—is used successively by the different types; so the miner also wants to use his material—steel—in his buildings. These changes in material are never introduced in their completeness. First of all we get steel framing

with the filling or casing of brick or stone; so possibly the contemplated steel house will be the ultimate expression of our mining civilisation. This remains to be seen!

The buildings of the Industrial Period may be called the buildings of the "pit-prop" style, and if this were the whole of the picture it would be a sorry and a dismal outlook, but inherent in the miner in his old vocational pursuits is another quality—the quality of excellence; and I think it might be argued that the miner is not only responsible for the worst of our buildings, but also for the best. As a quarryman he was used to the finish and excellence required by worked stone, so that we find under shepherd inspiration during the mediæval period, and under shepherd inspiration coupled with peasant stability enhanced by sailor contact in Greek times, he developed excellence as a characteristic of his stone work. We find him as a smith and jeweller throughout all periods developing this same excellence of workmanship. Even during the worst of the industrial period, when we used those hard-faced pink bricks that have desolated whole countrysides, this may have been nothing but a thwarted instinct towards excellence. In the rebuilding of Oxford Street it is interesting to note that the brick and stucco buildings of the late Georgian or formalistic peasant period are now being superseded by the steel frame and stone work of the miner.

Almost contemporaneously with the emergence of the miner as the dominant type and his continued warfare with the peasant during the earlier part of the nineteenth century—a warfare the reactions of which are still felt in the border land between cities and rural districts—there was witnessed another emergence, that of the shepherds, who, freed from the restraint of the dominating peasant with his formalistic notions, expressed himself in the "Tractarian and Evangelical Movements" and in the rapid growth of Nonconformity. It is interesting particularly to compare the development of Church Art during this period—freed from the peasant influence, the shepherd naturally turned to his fundamental ideas and expressed himself in the traditional buildings of his own period.

But the Gothic revival that started so hopefully, and which is still a great and important influence, was gradually and surely mechanised by the miner. As I have said, equally with the development, or the increasing importance of the miner, was the increasing importance of the sailor, and it is possibly due to this fact that towards the end of the nineteenth century, when we became dissatisfied with our architectural achievements, that the sailor, as an importer of ideas, led us into those innumerable essays in foreign styles characteristic of the closing years of that period.

So that from the murky confusion of the nineteenth century we gradually see certain clear vocational ideas emerging. Towards the end of this century, when the more intelligent miners became dissatisfied with their architectural achievements, there was a return to a more simple, and more traditional, method of peasant building.

Starting with Norman Shaw, who in his early days may be said to have built in the domestic version of the Gothic revival, and who then sought his instruction with sketch book and pencil in foreign countries, but returned to the Georgian period for his later inspiration, we now

come to the twentieth century, which I have already indicated as the

#### PERIOD OF ORGANISATION.

A close examination of the architectural movements of the last 25 years reveals certain clearly defined ideas, which I am going to be bold enough to try and relate to the different vocational types.

In the very beginning of this period we find what was then described as *L'art nouveau*, a continental importation which had a very mild re-action in this country. It was for the most part an unrelated expression of emotionalism owing its inception to the industrial movements in Germany and France, and in a vague and shadowy way indicating what men dimly felt to be the inauguration of a new era. It had no intellectual or traditional force behind it, with the consequence that it was all flower and no roots—a bright, brief burgeoning, followed by as quick a decay.

It may, perchance, in its dying have shed the seeds of an intellectual archaism, which we shall more closely examine when we come to consider what we may call "Modernism."

In domestic architecture we see two methods of expression, apparently contradictory, but in reality the result of the same inspiration.

The one method was a return to the Tudor or Elizabethan method of building, the other, the Renaissance or Georgian, and, although for the most part these streams are diverse and distinct, there is also observable, as it were, a merging or developing, so that we might say the Tudor or half-timbered cottage was expressive of the early years and the late Georgian house of the later years of the first quarter of the twentieth century.

Now returning to our vocational chart, we find that what we have really been doing during the last twenty-five years is to make a practical and imitative investigation of peasant methods of building—our peasant or agricultural period lasting, as I have said, from Henry VIII to George III, the "Farmer" King. This, the first quarter of the twentieth century, also witnessed a revival of the peasant handicrafts of weaving, printing, metal working, furniture making, etc. Small isolated groups of people, intent on being peasants, established themselves in various agricultural centres.

One of the most beneficial and helpful of the results of this peasant revival was the origination of Garden Cities which had in them the germinating idea of Town Planning; Town Planning being our most expressive and condemnatory criticism of nineteenth century "Mining Camp" muddle and mess.

One feature of modern architectural development that has bewildered most of us at various times is the marked divergence between the design of our domestic and our public buildings—a divergence, I think, largely due to the difference between two vocational types, viz., the difference between the peasant and the sailor. For, if in our twentieth century domestic building we have relied on

peasant inspiration, I think we must largely ascribe our public buildings to sailor inspiration.

If this deduction is correct, then we shall expect to find such influences radiating from our chief ports, and this is in effect what happened, our two chief centres of inspiration being London and your own city of Liverpool. Starting with London with its many continental relations, we have, first, the reaction to French architecture as typified by the buildings of the 1900 Exhibition in Paris, followed by a phase of Gallic Neo-Grec, which in its turn gave way to a pure Louis XVI revival, as exemplified in the buildings of the Ritz, *The Morning Post*, and various blocks of flats designed by Mr. Verity.

These buildings gave us a valuable lesson in continental scale and style—and by the word "style," I am not referring to any particular period, but rather to a definite expression of urban values.

But whilst we, in London, deteriorated in our efforts, and in the new Regent Street reverted to our Mining Camp method of approximation, you, in Liverpool, sought inspiration in America, and to my mind more truly indicated what was best in our mining civilisation—in pursuit of the excellence of the stone and steel fabrications of our friends across the Atlantic.

If I have not already fatigued you past all endurance with my types and phases, I should in conclusion for a few moments like to consider what, for want of a better word, we may describe as "Modernism."

It is a little early yet to say what "Modernism" is, or is not—and I must confess that I am not at all clear in my own mind as to what it exactly portends. But this I am sure of, and that is, that it is far too important a movement to dismiss with a contemptuous imprecation, or a mere shrug of the shoulders.

It seems to me that "Modernism" in this country is the result of various converging forces not yet altogether harmonised.

There is first the modern critical mind seeking inspiration and guidance in French logic, analysis and planning, whilst neglecting French sentiment. There is a definite and well-defined desire to express logically new materials and new methods of construction—though here I think we are a little half-hearted. I hear in various circles a good deal of talk of the necessity of a truthful expression of steel and reinforced concrete, but very little reference to the necessity for exact calculation, which seems to me must be the basis of any such expression. Then, last but not least, we have a strong emotional influence coming from Scandinavia with a vivid appeal to our Norse blood; an influence which might, perhaps, be compared to that of Ibsen in literature—"A strong, clean wind from the North" as it has been called, strengthening and fortifying us.

Thus we have peasant logic and sailor inspiration waiting to be unified by some relation to tradition, the sum of which, if it is to be successful and to have any permanence, must express our advanced mining civilisation.



## Review

OLD ENGLISH HOUSES. By J. A. Gotch.  
[Methuen. 16s. net; large 8vo.]

Everything that Mr. Gotch writes about old English houses is worth reading. In the present book he has cast his net wider than usual to interest those readers who are unfamiliar with the subject. A few, a very few, books with a similar aim catch on at once with the greater public, and after reading even one chapter of this book one feels that it ought to be on the shelves of every Englishman who can afford it and who is in the least interested in the heritage of his own country. To foreigners who are visiting this country it should be invaluable, as well as to students taking honours degrees in History or English at the Universities.

Apart, however, from its value to the public, Mr. Gotch's book distinctly fills a gap in the architect's library. It is a very good book to place in the hands of a young man intending to take up the practice of architecture, or (to cover a much wider field) of a young man or woman who shows any desire to study old buildings. It is, first and foremost, readable, and it is not at all easy to be so really informative in an attractive way. Mr. Gotch has achieved this difficult task with complete success. It is not only his very wide and deep knowledge of the subject he writes about that is apparent on every page, but his appreciation of the life that was contemporary with it. Rarely have we met with a book which identifies manners and customs so easily and naturally with the building art.

The division of the subject matter is interesting and must have taken some thought to arrive at. Alternatives readily present themselves, such as a division by centuries or by architectural style, the first of which, at all events, might appeal to the more precise minds of some of our continental neighbours. These things are always difficult, and if English work is dubbed "Carolean" and so forth, one has to have the courage of conviction that the titles used assist the imagination to such an extent as to become worthy of perpetuation; and Mr. Gotch is surely quite right, as nothing can make English architecture more vivid, at least to ourselves, than its association not with dates, but with great historic periods. There must be some generalisations, of course; thus in a matter of seven broad divisions, the first is "The Mediæval House" and the sixth is "The Small House"; the remainder being, in order, "Tudor," "Elizabethan," "Carolean," "Queen Anne" and "Georgian." The abandonment of the term "Jacobean" as a main division is a bold step; in other words, a mansion such as Audley End is considered as "Elizabethan," though built in Jacobean times. But there is a lot to be said for this: it is

broadly true that everything that "Jacobean" stands for is merged in Elizabethan work, except Inigo Jones, and Inigo Jones is as much "Carolean" as Jacobean and more definitely himself than either. The three chapters devoted to Elizabethan and Carolean work, together well over a third of the whole work, are most valuable and important. Nothing but a really close study could do justice to an epoch which produced, in less than half-a-century, three such dissimilar buildings as Audley End, Swakeleys (or Raynham) and Coleshill, and one would like to see Swakeleys or Raynham illustrated, as they stand for buildings which had a great influence in the latter part of the nineteenth century. It is inevitable, perhaps, that the work of Wren and Vanbrugh should figure so largely in "The Queen Anne House" and that the smaller domestic work of this very elusive period should suffer by comparison, but we must be grateful for the fine house in West Street, Chichester. The account of Inigo Jones's career is masterly, and conveys a life-like impression of the man and his work.

"The Small House" also constitutes a very valuable chapter, placed exactly in the right place. In "The Georgian House" one rather misses any illustration of the "square box" type of house with plain parapets and a roof practically invisible. It is interesting to note the almost exact resemblance between the roof treatments of the Georgian Eagle House, Mitcham, and the Carolean Coleshill. More interesting still is the narrowing down, into a tidy English form, of the pedimented doorway of late Georgian times, in contrast with the broader and more baroque treatment of Queen Anne or William and Mary doorways. It is matters like these that make the earlier motives, apart from detail, so valuable for study.

The book is admirably illustrated with photographic plates and with a few useful plans. The whole of the early part (Mediæval and Tudor) is as good as we should expect it to be from Mr. Gotch, but there is no particular part of the whole that can be singled out for excellence apart from the rest. Contemporary stories and conversations are freely introduced, such as that of Gammelyn from Chaucer. Mention has been made of Inigo Jones, but there is an equally fine study of the life of the great court-manager, Lord Burghley. When one has finished the book it is difficult to believe it has only 210 pages, as it is full of matter, though there is not a dull page in it. If there is one place where repetition can be noticed—roofs springing from eaves cornices, pp. 126 and 127—it is such an important point to stress that it may well be pardoned. The author himself has no doubt noticed one or two such small matters for revision and it will be surprising if the book does not run into a second edition before very long.

THEODORE FYFE [F.].

## Correspondence

### THE AMERICAN INSTITUTE OF ARCHITECTS AND WATERLOO BRIDGE.

*One Madison Avenue,  
New York, N.Y.  
28 September 1925.*

DEAR MR. DAWBER,—The ancient and beautiful Waterloo Bridge across the Thames possesses historic and artistic attributes of interest to other nations as well as to Great Britain. Please accept that fact as excuse for this address.

In behalf of the American Institute of Architects, I beg to express to the Royal Institute of British Architects the hope that some means may be found to preserve from destruction this truly national monument.—Yours sincerely,

D. EVERETT WAID  
(*President, the American  
Institute of Architects*).

Mr. E. Guy Dawber, President, R.I.B.A.

### REGISTRATION.

*19 October 1925.*

*To the Editor, JOURNAL R.I.B.A.,—*

DEAR SIR,—The attention of the R.I.B.A. Registration Committee has been called to the recent establishment of an Association of Architects and Surveyors which is inviting architects to apply for membership as a protection against the "danger of being prevented from earning their livelihood" as a result of impending legislation.

So far as the R.I.B.A. is concerned the suggested danger does not exist. It has never been the intention of the Registration Committee to propose legislation which will in any way affect the livelihood of anyone who at the time of the passing of the Act is making his living by the practice of architecture. The interests of all those who are now connected with the profession will be specifically safeguarded. It has never been our intention to limit the benefits of a Registration Act to those who are now members of the R.I.B.A. or its allied Societies, and the Bill which has just been drafted by the Registration Committee is perfectly clear on this point.—Faithfully yours,

HARRY BARNES,  
*Chairman of the R.I.B.A.  
Registration Committee.*

### EXHIBITION OF WAR MEMORIAL MODELS AND PHOTOGRAPHS.

*Imperial War Museum,  
South Kensington, S.W.7.  
15 October 1925.*

*To the Editor, JOURNAL R.I.B.A.,—*

SIR,—I am directed to inform you that the Trustees propose holding an exhibition of War Memorial Models and Photographs on the next anniversary of the Armistice.

We have already received over 1,000 photographs of memorials, and also the promise of many sketch models.

The President of the Royal Society of Sculptors kindly circularised all his members in this respect, and I should be glad to know whether you would be disposed to take similar action with regard to your own members. If so, we would suggest that a brief urgent letter might be sent out requesting architects who have been concerned in the erection of War Memorials to present to us for permanent record or lend a small framed photograph of the particular memorial or memorials for which they were responsible. In order to avoid duplication it might be suggested that the architects interested should first of all communicate with us in order that we may inform them whether or not we already possess a record.

As the Exhibition is to be opened on 11 November, we should require exhibits to reach us not later than the 31st inst.—Yours faithfully,

CHARLES FFOULKES,  
*Curator and Secretary.*

### THE LIFE AND WORK OF SIR JOHN SOANE.

*To the Editor, JOURNAL R.I.B.A.,—*

DEAR SIR,—Mr. W. T. Benslyn in his review of my book states: "The old question of whether it is legitimate to put recesses in a blank wall is beside the point." I agree; it is so much beside the point that there is no discussion of it in my book, as Mr. Benslyn will see if he takes the trouble to read it carefully. I have, however, some remarks to make about the kind of recesses which Soane adopted in the Bank of England. An entirely different matter. He who attempts to review a book without reading it, carefully, is in more danger of finding himself in "deep water" than the writer.—Yours faithfully,

H. J. BIRSTINGL [A].

### LIGHTING OF PICTURE GALLERIES.

*Santa Barbara,  
California.*

*To the Editor, JOURNAL R.I.B.A.,—*

SIR,—A copy of the JOURNAL of 25 April has just reached me here. In it Mr. Waldram reiterates the statement to which I took exception in Mr. Markham's letter that "glass must always reflect something."

No progress can be made in the scientific lighting of galleries unless it is realised that this statement is a fallacy. It is because reflections in glazed pictures have universally been held to be inevitable that no attempt has been made to overcome them. Mr. Waldram is evidently not convinced by the tests I have made and already published in the JOURNAL. These tests I had held to be absolutely conclusive to all; that they are not so makes it necessary to ask you for space to approach the subject from another point of view, for the lessons to be learned from the phenomenon of Pepper's ghost exhibited in the old Polytechnic in one's boyhood days should long ago have taught us that, although in the polished surface of clear glass we have a potential reflector, it cannot become one until the lighting conditions are suitable. The phenomenon was produced by enclosing the front of the stage with a large sheet of plate glass, inclined forward at the top to the angle necessary to reflect the person representing the ghost, who enacted his part in front of the glass under the dimly



*lighted gallery*; in this gallery, the whole of the spectators were gathered. In viewing the well-lighted stage the spectators were not conscious they were looking through an inclined sheet of glass—a potential mirror. It did not reflect—it was not a mirror till the lights on the stage were lowered and the hidden “ghost” in front of the glass was illuminated.

Then the glass became powerful as a mirror in exact proportion to the relative illumination of the visible and invisible stages.

When the lights on the visible stage were turned out and the maximum light thrown on the hidden actor, the “ghost” of course held undisputed possession.



Fig. 1.—THE ART INSTITUTE OF CHICAGO

Colonnade on upper landing looking N., illustrating the central corridor method advocated in conjunction with the top-side-light. Here the top-lay-light is seen which becomes a top-side-light only when the sun is shining.

In spite of this conclusive evidence of the reason why glazed pictures act as reflectors, galleries in all parts of the world have been constructed in such a way that the spectator (who plays the part of the ghost) and the objects in the room are invariably illuminated to a greater degree than the picture, thus producing exactly the same results as were seen on Pepper's stage, and can be seen at any moment by any one who, standing in the subdued light of a room, looks through the window at the brightly lighted view and then, placing himself in the bright exterior light,

attempts to look in. He will then find that his “ghost” is distinctly visible and often—as may be seen in the great majority of shop windows—completely screens the interior from his view. It is not till night, when the electric light arranged on the top-side-light principle has produced perfect lighting conditions, that the displays—often of great beauty—are fully seen.

The value of a subdued light on the spectator I again proved at the Art Institute of Chicago, where—as shown in the illustrations—I found an excellent example of one of the methods I have advocated—a corridor having a solid ceiling and the walls on either side top-side-lighted. The effect was splendid—the subtleties of the large glazed paintings were fully revealed without any trace of reflections. In this case the gallery was top-lighted by the ordinary sky and lay-lights, but the effect of a top-side-light was produced because the sun was brightly shining, and consequently, at the time of my visit—10.30—the western picture wall was much more brilliantly lighted than the space where the spectator would naturally stand.

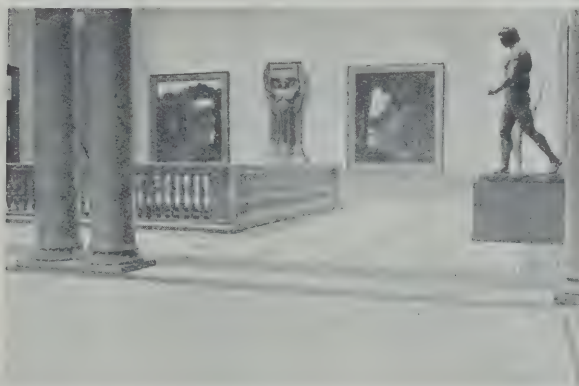


Fig. 2.—THE ART INSTITUTE OF CHICAGO

The upper landing taken from the colonnade at top of stairs looking W. at 10.30, when the sun was shining and the glazed pictures were brilliantly illuminated. They were then totally free from reflections. Note the brilliancy of the light on wall and on floor close to it, as compared with the relatively subdued light at and near the colonnade. Note also the shadow on the S. wall, where the reflections on the pictures were at this time overpowering. It is these transient effects of sunlight which may be permanently obtained by the top-side-light method.

The light in the glazed pictures was 100 f.c. and under the corridor and for some distance beyond 20 f.c.—a ratio of 5 to 1. The gradation of light can be easily seen on the floor of illustration No. 2. This ratio I had previously determined—at the brilliantly lighted galleries at Wembley, and also in galleries having only 10 f.c. on the pictures—to be the ratio necessary for the elimination of reflections.

Mr. Waldram asks for a number of scientific data. These are unessential to the proving of the fundamental fact that reflections in glazed pictures are not inevitable.

To give more than I have given would only create a scientific system of supports by which far too often the practical value of the scientific truth is hidden. Moreover,

they would lead us into trains of thought away from the point under immediate discussion—later the other points referred to will be considered—but there is one statement in Mr. Waldram's letter calling for immediate consideration. He says: "The difficulties of lighting picture galleries satisfactorily without reflections are not amenable to any one specific remedy . . . and there are aspects of picture lighting both natural and artificial with regard to which considerable difference of opinion is still possible."

This statement is likely to retard the progress now being made towards better lighting, and I must therefore state most emphatically that there cannot be any "difference of opinion" whatever; that the "specific remedy" in all cases is to ensure that the picture walls shall be the best lighted part of the room. This remedy, so simple, so easy of application, can be carried out—as I have already shown—in an infinite variety of ways.

No system can be successful which does not abide by this fundamental law, and it will be found on examination of those that do abide by it that they have in them the essential elements of the top-side-light method.—Yours faithfully,

S. HURST SEAGER [*F.*].

## Third Exhibition of the Architecture Club

BY DARCY BRADDELL [*F.*]

The Architecture Club has celebrated the end of its third year of existence with an exhibition which is housed for the first time in the R.I.B.A. galleries.

The President of the Institute, Mr. E. Guy Dawber, was on the platform and contributed the kindest of congratulatory speeches when the exhibition was formally opened by Mr. G. K. Chesterton, with Mr. J. C. Squire, the President of the Club, in the chair. The venture thus starts in the happiest circumstances and the Club is more than pleased to think that its efforts are being recognised and approved by the R.I.B.A.

It is sincerely to be hoped that, for the good of architecture, the general body of the public will take a similar view and support the exhibition in large numbers. When it is remembered that, except for the very small room in the Royal Academy devoted to architecture, this is the only exhibition of its kind to be seen in London, it is indeed astonishing that the rooms should not be filled to overflowing for the whole of the three weeks during which they will be open.

Public interest in architecture is unquestionably on the increase—to a certain extent in this country, to a very much more marked one in others, particularly in the smaller countries. Now, the sole aim of the Architecture Club being to bring before the public what it believes to be the best in architecture to-day, the point cannot be too much stressed that it is not, and

never has been, in any way, a secessionist body. Membership does not include a preordained right to have work accepted, so that it is not that of a privileged few, but rather a representative majority, which is now to be seen in the Maddox Street Galleries.

There are a few eminent names missing; none is more regretted than that of the President of the Institute, whose exhibit did so much to grace the show at Grosvenor House last year; but, on the whole, almost every well-known architect is represented. In spite of this the walls are distinctly on the empty side, as it was felt that to overcrowd would be to defeat the aims of the exhibition—viz., to interest and not to tire the lay public. The result has been that much meritorious work has had to be rejected on all sides. Nobody regrets this more than the Committee of the Club, and the extraordinary response made by the profession is not only very gratifying but goes to prove how needed, in their eyes at least, an exhibition of this description is.

The exhibits have been divided into three classes: "Recent Architecture," "Decoration," and "Preliminary Sketches." The section devoted to the first named of the three consists of large scale photographs illustrating buildings of every kind both from within and without. It is now an accepted dictum that this is probably the most satisfactory method of showing architecture to the public, although there can be instances where the scale of the work illustrated is not commensurate with that of the photograph. The fault can also lie the other way. For example, some of the best and most important subjects in the exhibition—viz., that of Sir Giles Gilbert Scott (193-195) and Mr. Herbert Baker (252-257)—have suffered from being too modestly illustrated. This charge cannot be made against Sir John Burnet, whose Adelaide House (202-204) is shown by a set of magnificent photographs that are worthy of so fine a subject.

It is always an invidious task picking and choosing, particularly when the general level, as is the case here, is a high one, but of the larger buildings exhibited mention can fairly be made of Mr. Maufe's new brick church at Acton (196-197), Mr. W. G. Newton's Marlborough College War Memorial (187-192), Mr. W. H. Ansell's Church of Humanity, Liverpool (209-211), Messrs. Carrere & Hastings and Professor H. Reilly's Devonshire House (75-78), the Birkenhead War Memorial of Professor Lionel Budden (240-241) (which is illustrated by a most admirable photograph).

The usual high level of domestic work which is looked for from English architects is fully maintained, and the visitor cannot but be struck by many notable little houses, notable not on the score that they have accomplished anything startlingly new, but on other less obvious grounds. The trend to-day is towards an adaptation of the forms and ideals of the eighteenth to the requirements of the twentieth century. The



majority of the houses clearly show this, for they rely on their appeal to good proportion and symmetry rather than on desire for expensive texture or ornament.

The Decoration section, which consists of coloured drawings, has nothing of very great note in it. There are all kinds of conceptions, from the ultra modern, which has still a long way to go before it finds its feet, to the eighteenth century tradition of good placid taste.

The third and novel section, of "Architects' Preliminary Sketches," has not quite fulfilled its object, which was meant to show the general public how architects work. Of all the sketches shown Mr. Ralph Knott's rough drawing for "Angle Treatment," Government Buildings, Belfast (18), is easily the most interesting. It shows as clearly as possible the first conception of the forms of a building as it is evolved in the architect's mind, and when compared with his finished building it should be of great interest.

One last word. The absence of what may be referred to as Wardour Street architecture—the architecture of the adzed oak beam and the sagging roof—is to be noted. Although this kind of thing is popular with the public, the Architecture Club, in setting its face steadily against it, is furthering the cause of those who would wish architecture to look forward and not back.

## Allied Societies

### WESSEX SOCIETY OF ARCHITECTS

The annual dinner of the Wessex Society of Architects was held at Cheltenham on 23 October, the President Mr. G. C. Lawrence, in the chair. Amongst those present were: Mr. E. Guy Dawber (President of the Royal Institute of British Architects), Sir Philip Stott, Bart. County High Sheriff, Sir George Oatley (Bristol), Lieut.-Col. N. H. Waller (President of the Gloucestershire Architectural Association), Mr. E. B. Kirby (President of the Liverpool Society of Architects), Mr. H. H. Hardy (Headmaster of Cheltenham College), Mr. Ian MacAlister (Secretary, R.I.B.A.), Mr. F. W. Waller (Gloucester), and Major Stratton Davis (hon. secretary).

Before dining Mr. Dawber invested Mr. G. C. Lawrence with the President's badge, which had been designed by a Wessex architect and modelled by a Wessex sculptor.

Mr. Dawber said he looked upon their President as the real father of the Wessex Society. For a long time the Bristol Society had been affiliated to the Royal Institute, and they also had in Gloucestershire an Architectural Association which was not affiliated with either the Bristol Society or with the Institute; and it was owing to Mr. Lawrence's initiative and exertions that these two societies were now amalgamated into one organisation called the Wessex Society of Architects. On behalf of the Institute he wished their Society every possible success, and it gave him the greatest amount of pleasure to invest Mr. Lawrence for the first time with his badge of office. Colonel Waller proposed the toast of The Royal Institute of British Architects.

Mr. Dawber, replying, said that he happened to know Wessex. He had done work in all the four counties, and had a fair knowledge of all the materials to be found in them; but above all his heart went out to the Cotswolds. It was in the Cotswolds that he learnt what a real, sound, sensible English building was, a building which grew out of the materials ready to hand and most suitable for the purpose for which it was designed. The houses built by the wool merchants of the Cotswolds still remained as examples of the beautiful architecture of the first half of the seventeenth century. Proceeding, Mr. Dawber remarked they had to solve their architectural problems in their own way. They did not need to copy the work of past years, but should have the courage of their own opinions, and do their work with the best of the materials at their command.

Mr. Ian MacAlister submitted the toast of "The Allied Societies." In 1908, he observed, there were 20 of these societies with members counted by hundreds; to-day the societies and branches numbered 60, and the membership was well into thousands, every part of the Empire being represented by a society or a branch.

Mr. E. B. Kirby, President of the Liverpool Architectural Society, replied, and drew a parallel between the societies and their relations with the Institute, and the Territorial Forces and their relations with the regular Army.

Sir Philip Stott and Mr. H. H. Hardy also spoke.

At the conclusion Major Stratton Davis (hon. secretary) referred to the work of Mr. T. Overbury, of Cheltenham, who 18 years ago conceived the idea of a local association of architects.

### THE LIVERPOOL ARCHITECTURAL SOCIETY.

#### SYLLABUS OF SESSIONAL MEETINGS.

1925.

*November 19.*—Paper by Bernard A. Miller, B.Arch., A.R.I.B.A., on "Modern Church Architecture" (lantern slides).

*November 25.*—Paper by John Swarbrick, F.R.I.B.A., on "Robert Adam" (lantern slides).

*December 9.*—Paper by Lieut.-Col. H. P. Cart de Lafontaine, O.B.E., T.D., on "The Devastated Regions of France" (lantern slides).

1926.

*January 13.*—Paper by W. Naseby Adams, A.R.I.B.A., on "Taste" (lantern slides).

*January 27.*—"Honan Night," paper by Leonard Gordon Hannaford, A.R.I.B.A., on "A Visit to Italy—Impressions" (lantern slides).

*February 10.*—Paper by H. Chalton Bradshaw, A.R.I.B.A., on "The Architecture of the Paris Exhibition" (lantern slides).

*February 24.*—Paper by H. S. Goodhart-Rendel, F.R.I.B.A. (lantern slides).

*March 1.*—Informal Talk by Sir Giles Gilbert Scott, R.A., F.R.I.B.A., on "Liverpool Cathedral" (illustrated with working drawings).

*March 10.*—Paper by F. J. Kirby, F.S.I., on "Modern Practice on Computation of Damage to Lights."

*March 24.*—Paper by Charles W. Budden, M.A., M.D., on "Parish Churches in England, 1350-1545, with special Reference to their Regional Development" (lantern slides).

*April 7.*—Paper by F. O. Lawrence, B.Arch., A.R.I.B.A., on "Ostia and the Origin of the Modern Flat" (lantern slides).

The date of the annual dinner will be announced later.

## THE R.I.B.A. NEW CLASS OF SUBSCRIBERS.

In the Supplemental Charter recently granted to the R.I.B.A., provision is made for the formation of a non-corporate class of Subscribers. The Council have the power to elect to this new class any persons who, not being professional architects, are interested in the activities of the Royal Institute and in architectural matters generally.

"Subscribers" will be entitled to use the Loan and Reference Library, to attend all General Meetings (except private Business Meetings) and to receive a copy of the Annual Report. They will not, however, be entitled to use in connection with their name or business any words or initials indicating that they are Members of or connected with the Royal Institute.

The annual contribution payable by a "Subscriber" will be £1 1s. The first payment will become due within two months of election and subsequent payments on the first of January each year. Subject to the additional payment of 12s. per annum, Subscribers will also receive post free the R.I.B.A. JOURNAL, which is published fortnightly during the Session (November to June) and monthly during the recess.

The Council cordially invite applications from ladies or gentlemen who desire to be thus associated with the work of the Royal Institute, and the necessary nomination form can be obtained on application to the undersigned.

IAN MACALISTER,  
Secretary R.I.B.A.

## REGISTER OF ARCHITECTS WILLING TO TAKE RECOGNISED SCHOOLS STUDENTS IN THEIR OFFICES.

On the recommendation of the Board of Architectural Education, the Council have decided to establish at the office of the R.I.B.A. two registers:

- (1) a register of advanced students of recognised schools.
- (2) a register of the names of architects willing to take such students.

The intention is in this way to assist advanced students up to the stage of the completion of their qualifications for exemption from the Final Examination; one of the qualifications for exemption from the Final Examination being twelve months' experience in an office during the fourth and fifth years of the school course.

The Council hope that general use will be made of the registers, and that as many architects as possible will place their names upon the register.

## RESTRICTIONS ON TENDERING.

Several requests having recently been received for advice as to the attitude which should be adopted by an architect when faced with the restriction on tendering which arises from the refusal of contractors to tender in competition with certain "proscribed" firms, the Council of the R.I.B.A. recommend that the architect, when informed by a contractor or firm of contractors that their tender is conditional upon the omission of the names of certain "proscribed" firms from the list of those invited to tender, should convey such information to his clients and act upon the instructions which he receives.

## R.I.B.A. (ARCHIBALD DAWNAY) SCHOLARSHIPS.

The Board of Architectural Education have made the following Awards:—

J. Breakwell (Architectural Association), £75 Scholarship.

W. R. Brinton (Architectural Association), £50 Scholarship.

R. P. Cummings (Architectural Association), Special additional £50 Scholarship.

G. A. Burnett (Leeds School of Art), Grant of £10.

A. C. Todd (University of Liverpool), Grant of £10.

## EXCAVATIONS AT UR.

Mr. A. S. Whitburn [A.] has been appointed architect to this season's expedition to continue the excavations at Ur. The expedition is being sent out jointly by the British Museum and the Museum of Pennsylvania University. Members of the Institute contributed £70 6s. to the Fund, out of which Mr. Halsted Best [F.] contributed forty guineas.

## R.I.B.A. SILVER MEDAL FOR RECOGNISED SCHOOLS.

The R.I.B.A. Silver Medal for the best set of drawings submitted at the annual Exhibition of Designs of Students of Recognised Schools exempted from the Final Examination has been awarded to Miss Thelma Silcock (Diploma in Architecture, School of Architecture, University of Liverpool).

## AUTUMN PUBLICATIONS.

Messrs. B. T. Batsford's list of announcements includes:—  
*Historic Costume*: A chronicle of fashion in Western Europe, 1490–1790, by F. M. Kelly, with 80 illustrations in colour and from photographs, and about 200 pen sketches by Randolph Schwabe. Professor Richardson, F.S.A., is collaborating with H. Donaldson Eberlein, the well-known American writer, in producing a work on *The English Inn; Past and Present*, with about 250 illustrations from photographs, old drawings and sketches, and also *The Smaller English House from the Restoration to the Victorian Era, 1660–1840*, a review of its Design, Plan, Features and Detail; illustrated by numerous photographs and drawings, including a number by the authors. *Living Sculpture*; A series of photographic figure-studies by Bertram Park, with a historical introduction by G. Montague Ellwood, editor of *Drawing and Design*. *A History of Wallpaper Design in England from the earliest times to 1914*, prepared for the Wallpaper Manufacturers' Association, by J. L. Edmondson and A. V. Sugden, and illustrated by 70 plates in colour and about 90 in monochrome. *Sketching in Lead Pencil for Artists, Architects and others*, by Jasper Salwey, illustrated by the author and a number of well-known draughtsmen, and serving as an introduction to the author's successful larger book on the Art of Drawing in Lead Pencil. *The Roman Alphabet and its Derivatives*, by Allen W. Seaby, Professor of Fine Arts, Reading University, containing large-sized reproductions of the lettering of the Trajan Column, specially engraved on wood by the author. *A Short History of Art from Prehistoric Times to the XIXth Century*, translated from the French of Dr. André Blum and edited by R. R. Tatlock, Editor of the *Burlington Magazine*, illustrated by 250 examples of great paintings, sculpture and architecture.



# NATIONAL HEALTH INSURANCE.

*The Architects' and Surveyors' Approved Society.*  
26 Buckingham Gate, London, S.W.1.

## CONTRIBUTIONS.

The Contribution for men is 10d. per week, and for women 9d. per week, 5d. of which is in each case payable by the employer.

## ORDINARY BENEFITS.

**SICKNESS BENEFIT.**—Men, after 26 contributions have been paid, 9s. weekly; after 104 contributions have been paid, 15s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly; after 104 contributions have been paid, 12s. weekly.

**DISABLEMENT BENEFIT.**—Men and Women, 7s. 6d. per week, after 104 contributions have been paid.

**MATERNITY BENEFIT.**—40s. after 42 contributions have been paid.

## ADDITIONAL BENEFITS.

**SICKNESS BENEFIT.**—Payable at the increased rates of 22s. per week for men, and 19s. for women.

**DISABLEMENT BENEFIT.**—Increased to 11s. per week for both men and women.

**MATERNITY BENEFIT.**—Increased to 54s.

**SPECIAL BENEFITS.**—Grants made to members entitled to "additional benefits" amounting to the full cost of any optical, dental, hospital or convalescent treatment, also for glasses, surgical appliances, artificial teeth, etc. Members may choose their own institutions, nursing homes or practitioners.

Further particulars and forms of application for membership may be obtained from the undersigned.

HERBERT M. ADAMSON,  
*Secretary.*

## ARCHITECTS' BENEVOLENT SOCIETY.

The Council of the Architects' Benevolent Society have gratefully to acknowledge a donation of £1,000 (nominal) £2 10s. 0d. per cent. annuities received from Mr. H. S. E. Vanderpant for the purpose of founding "The Henry L. Florence Annuity."

## A.B.S. SCHEME OF PROFESSIONAL INSURANCE.

Insurance to-day is a very complicated business and too much care cannot be exercised in the choice of an insurance company and of a policy. If, however, architects consult the Insurance Committee of the Architects' Benevolent Society, they are sure of obtaining competent guidance in all insurance matters. Especially favourable terms are secured by the Society, and every insurance negotiated through its agency results in a direct contribution to the Benevolent Fund. Enquiries should be addressed to the Secretary, A.B.S., 9 Conduit Street, W.

## A.A. PANTOMIME.

The Architectural Association Pantomime will be performed at 8 p.m. from Wednesday 16 to Saturday 19 December (matinée on the 17th at 2.30 p.m.) in the Galleries of the R.I.B.A. Applications for tickets (3s., 1s. 9d., 8s. 6d., including tax) should be made to Miss M. Hodgson, 34, Bedford Square, W.C.1 (Telephone No. Museum 4957). The profits from the performances will be in aid of the Architects' Benevolent Society.

# Notices

## THE SECOND GENERAL MEETING.

The second General Meeting (Ordinary) of the Session 1925-26 will be held on Monday, 16 November 1925, at 8 p.m. for the following purposes:

To read the Minutes of the first General Meeting (Ordinary) held on 2 November 1925; formally to admit members attending for the first time since their election or transfer.

To read the following Paper: "The Architect and his City," by Dr. Raymond Unwin [F.].

## ELECTION OF MEMBERS, 30 NOVEMBER 1925.

An election of members will take place at the Business General Meeting to be held on Monday, 30 November. The names and addresses of the candidates (with the names of their proposers), found by the Council to be eligible and qualified for membership according to the Charter and Byelaws and recommended by them for election, are as follows:

### AS FELLOWS (97).

**ABERCROMBIE:** PROFESSOR LESLIE PATRICK, M.A., Liverpool [A. 1915], Department of Civic Design, School of Architecture, University of Liverpool; 18 Village Road, Oxtun, Birkenhead. Proposed by Arnold Thornely, E. Bertram Kirby, Maurice E. Webb.

**BINNIE:** MAJOR WILLIAM BRYCE, M.C. [A. 1920], Imperial War Graves Commission, Longuenesse, St. Omer (P. de C.), France. Proposed by Sir Reginald Blomfield, R.A., Sir Edwin L. Lutyens, R.A., Herbert Baker, A.R.A.

**DICKMAN:** HENRY ALDERMAN, M.C. [A. 1910], 1 King's Walk, Nottingham; Wood Lane, Gedling, Nottingham. Proposed by Harry Garnham Watkins, Ernest R. Sutton, A. Ernest Heazell.

**DOBIE:** WILLIAM GLEN [A. 1892], The Temple, Dale Street, Liverpool; Braehead, Oxtun, Birkenhead. Proposed by T. E. Eccles, E. Bertram Kirby, Gilbert Fraser.

**HENNEL:** SIDNEY THORN [A. 1910], 97 Jermyn Street, Piccadilly, W.; 16 Earlsfield Road, Wandsworth, S.W.18. Proposed by J. Duncan Tate, A. Burnett Brown, W. E. Watson.

**HOBBS:** FREDERICK BRICE [A. 1895], May Buildings, 51 North John Street, Liverpool; "Tower Lea," Waterloo, Liverpool. Proposed by E. Percy Hinde, O. D. Black, Hastwell Grayson.

**MCLEAN:** ARCHIBALD JOHN [A. 1909], 3 Palace Place, Brighton; 179 Ditchling Road, Brighton. Proposed by the Council.

**METCALFE:** CECIL BROADBENT [A. 1909], County Offices, Jermyn Street, Sleaford, Lincs; 68 Grantham Road, Sleaford. Proposed by Eric Morley, W. J. Morley, George H. Widdows.

**POLE:** THOMAS ALOYSIUS [A. 1895], 10 Gray's Inn Square, W.C.1; Hurlocks, Billericay, Essex. Proposed by Henry A. Saul, Sir John W. Simpson, Sir Edwin Cooper.

**SUTCLIFFE:** FREDERICK [A. 1919], 21 Northumberland Avenue, W.C.2; 33 Cator Road, Sydenham, S.E. Proposed by C. Ernest Elcock, J. B. F. Cowper, Septimus Warwick.

**TASKER:** WILLIAM WATT, M.C. [A. 1909], The Moothall, Newcastle-on-Tyne; 32 Larkspur Terrace, Newcastle-on-Tyne. Proposed by Jas. T. Cackett, R. Burns Dick, G. Reavell.

**TURNER:** HORACE GEORGE [A. 1910], c/o Messrs. Hemmings & Berkeley, Hankow, China. Proposed by Professor A. E. Richardson, Henry Tanner, Alfred Cox.

WOOD : ARTHUR JACKSON [A. 1914], 18 New Street, Leicester ; "Prestwold," Westfield Road, Leicester. Proposed by Arthur H. Hind, Clement Stretton, W. H. Riley.

WOOLLATT : JOHN [A. 1910], Eldon Chambers, Wheeler Gate, Nottingham ; Newcastle Avenue, Beeston, Notts. Proposed by Robert Evans, A. Ernest Heazell, A. Nelson Bromley.

*And the following Licentiates, who are qualified under Section IV, Clause C (ii), of the Supplemental Charter of 1925 :—*

ABBOTT : ERNEST HENRY, 6 Warwick Court, Gray's Inn, W.C.1 ; 41 Queen's Gate Gardens, South Kensington, W. Proposed by Wm. Woodward, Henry N. Kerr, W. H. Woodroffe.

BAKES : JAMES HARPER, Calverley Chambers, Victoria Square, Leeds ; 12 The Grove, Idle, Bradford. Proposed by Percy Robinson, Eric Morley, Wm. Illingworth.

BIRAM : ERNEST FRANK STUART, 17 George Street, St. Helens, Lancs ; 1 Princes Gate East, Liverpool. Proposed by H. L. Paterson, T. Taliesin Rees, T. F. Shephard.

BOYD : JOHN WILLIAM, 9 Salisbury Gardens, Newcastle-on-Tyne. Proposed by G. Reavell, A. K. Tasker, R. Burns Dick.

COMPTON : CHARLES EDWARD, 35 Commercial Street, Newport, Mon. ; St. Hilary, 49 Llanthewy Road, Newport, Mon. Proposed by John Francis Groves, John Bain, Chas. F. Ward.

DAVIES : SAMUEL, 6 Alvanley Terrace, Frodsham, Cheshire. Proposed by Edward Hewitt and the Council.

FRENCH : SIDNEY, 40 Regent Street, Cambridge. Proposed by Charles F. Skipper and the Council.

GARDNER : ALEXANDER, 134 Bath Street, Glasgow ; "Kingsbeck," 89 Eldon Street, Greenock. Proposed by John Fairweather, John Thomson, Ninian Macwhannell.

GARRETT : THOMAS, 34 Ship Street, Brighton ; 54 Brunswick Square, Hove. Proposed by Gilbert M. Simpson, J. G. Gibbins, Wm. H. Overton.

HEYWOOD : JAMES HERBERT, 1 St. Peter's Street, Oldham ; 73 Queen's Road, Oldham. Proposed by Ernest Simister, Joseph Crouch, W. Alexander Harvey.

MORRIS : WILLIAM RICKARDS, 22 The Forbury, Reading ; "Gorhuysta," Northcourt Avenue, Reading. Proposed by William Ravenscroft, Harry Hutt, C. B. Willcocks.

NUNNS : WILLIAM RHODES, Estate Office, Saltaire ; 2 Albion Road, Saltaire. Proposed by H. S. Chorley, Eric Morley, W. Williamson.

PARR : THOMAS HENRY NOWELL, 42 Cranley Gardens, S.W.7 ; "Beverly Oaks," Warren Road, Coombe Warren, Surrey. Proposed by E. C. P. Monson, Sir Banister Fletcher, William G. Hunt.

RAFFLES : WINTER HARGREAVES, 12 Bloomsbury Square, W.C.1 ; 22 The Grove, Boltons, South Kensington, S.W.10. Proposed by E. W. Marshall, Jno. Begg, Sir Aston Webb.

SHARP : WALTER RICHARD, 40 South King Street, Manchester ; "Paxford," St. Andrews Road S., St. Anne's-on-Sea. Proposed by Paul Ogden, J. W. Beaumont, Isaac Taylor.

SIMPSON : GEORGE, 233 St. Vincent Street, Glasgow ; 6 Milner Road, Jordanhill, Glasgow. Proposed by Alexander N. Paterson, Wm. B. Whitie, James Lochhead.

TRIBE : ARTHUR WALTER, 33 Craven Street, Strand, W.C. ; Arundel House, Cheam, Surrey. Proposed by J. Herbert Pearson, F. A. Powell, Charles J. Smithem.

WEST : JOHN GEORGE TIMOTHY, The Knowl, Abingdon. Proposed by N. W. Harrison, Harry Hutt, C. B. Willcocks.

WILKINSON : ARTHUR GROSVENOR, Imperial War Graves Commission, St. Omer, France ; 19 Rue Carnot, St. Omer, France. Proposed by S. Wilkinson, Paul Ogden, Francis Jones.

WINMILL : CHARLES CANNING, 2 Eliot Place, Blackheath, S.E.3. Proposed by W. E. Riley, Leonard Stokes, The Rt. Hon. Earl Ferrers.

*And the following Licentiates, who have passed the qualifying examination :—*

ADAMS : WILLIAM HENRY, Town Hall, Highgate, N.6 ; 37 Chandos Avenue, Oakleigh Park, N.20. Proposed by the Council.

ANDERSON : STANLEY PERFITT, 13 Durlston Road, Kingston-on-Thames. Proposed by A. Jessop Hardwick, A. Heron Ryan Tenison, R. J. Thomson.

BENTLEY : CLAYTON MOFFAT, 53 Church Street, Whitehaven. Proposed by the Council.

BEVERIDGE : DAVID ALSTON, Prudential Buildings, 36 Dale Street, Liverpool ; 2 Manville Road, Wallasey, Cheshire. Proposed by Arnold Thornely, Edgar Quiggin, E. B. Kirby.

BIRD : ERNEST, 11 Portland Street, Southampton ; 55 Lumsden Avenue, Southampton. Proposed by John H. Blizard, Thomas R. Milburn, J. Arthur Smith.

BLACKBOURN : CHARLES EDWIN, 34 Finsbury Square, E.C.2 ; 355 High Road, Tottenham, N.15. Proposed by Gilbert H. Lovegrove, Professor R. Elsey Smith, Walter R. Jaggard.

BODDY : PERCY CHARLES, 19 Palace Street, Westminster, S.W.1 ; "Sorrento," Ruislip, Middlesex. Proposed by Alfred Cox, Fredk. Ernest Williams, W. Ralph Low.

BRETT : CHARLES, 168A Albion Road, Stoke Newington, N.16. Proposed by R. H. J. Mayhew and the Council.

BRETT : ERNEST JOHN, 72 West Boro', Wimborne Minster, Dorset ; Anglebay, Colehill, Wimborne. Proposed by Samuel J. Newman, John H. Blizard, F. C. R. Palmer.

BRIDGES : OSWALD ARTHUR, "Waratah," Richmond Avenue, Bognor, Sussex. Proposed by Geo. Edw. Withers, J. Craddock Perkin, John A. Cheston.

BROWNE : F. ANSTEAD, Architect to the County Agricultural and Small Holdings Committee of the Cheshire County Council ; Inglewood, Dee Hills Park, Chester. Proposed by H. P. G. Maule, G. Topham Forrest, William Eade.

BURGESS : JULIAN GULSON, Beaconsfield and 13 Gray's Inn Square, W.C. ; Netherlands, Beaconsfield. Proposed by C. H. Biddulph-Pinchard, Fred Rowntree, James Ransome.

BURNETT : ERNEST WHITFIELD, The Estate Office, Colwyn Bay, N. Wales ; "Toft Butt," Llannerch Road, West, Colwyn Bay. Proposed by G. A. Humphreys, C. Ernest Elcock, Percy Thomas.

CAMERON : EDWIN PERCY, 16 and 17 Devonshire Square, Bishopsgate, E.C. ; 18 Eastwood Road, South Woodford, Essex. Proposed by Arthur H. Church, Arthur Keen, W. Curtis Green.

CANNELL : ERNEST WILLIAM, 259 High Holborn, W.C. 39 Hetherfield Road, Streatham Hill, S.W. Proposed by George Coles, Horace Gilbert, John A. Gill-Knight.

CASTLE : SYDNEY ERNEST, 40 Albemarle Street, Piccadilly, W.1 ; Burntwood Lane, Wandsworth Common, S.W.17. Proposed by Septimus Warwick, A. Jessop Hardwick, A. Blomfield Jackson.

CHERRY : HAROLD GRIFFITH, 7 Buckingham Street, Adelphi, W.C.2 ; Digswell, Welwyn, Herts. Proposed by Sir Edwin L. Lutyens, R.A., Henry Tanner, Alfred Cox.

COTMAN : GRAHAME, Queen Street, Norwich ; Mill Hill Strumpshaw, Norwich. Proposed by Edw. T. Boardman, E. Guy Dawber, Alfred B. Yeates.

DAVIS : HAROLD STRATTON, M.C., 65 Northgate Street Gloucester ; Home Cottage, Hardwicke, nr. Gloucester. Proposed by Thomas Overbury, G. C. Lawrence, S. H. Healing.

EVANS : ERNEST HOLLYER, 17 Bedford Square, W.C.1. Proposed by C. E. Varndell, Robert Atkinson, Howard Robertson.



- FAIRWEATHER**: HUBERT MOORE, 12 Carteret Street, Queen Anne's Gate, S.W.1; 25 Beeches Avenue, Carshalton, Surrey. Proposed by William A. Pite, Walter H. Brierley, W. D. Caröe.
- FORBES**: JAMES, 19 Grange Road, Middlesbrough; Craigievar, Marton-in-Cleveland, Yorks. Proposed by Charles S. Errington, G. Reavell, T. Ashton Lofthouse.
- HAIGH**: BERTRAM HUGH PARKIN, Broadway Court, Westminster, S.W.1; "Woode Weye," Heronsgate, Chorley Wood, Herts. Proposed by A. Heron Ryan Tenison, Fredk. Chatterton, A. Jessop Hardwick.
- HARPER**: LEONARD EWEN, 191 Corporation Street, Birmingham; "Briarwood," Blossomfield, Solihull, Birmingham. Proposed by Herbert T. Buckland, Edward Mansell, John P. Osborne.
- HARRINGTON**: LLEWELLYN HARRY, "Fourways," Croham Manor Road, South Croydon. Proposed by Herbert Read, W. B. Simpson, Arthur C. Blomfield.
- HIDER**: ERNEST JAMES WEDLOCK, 11 Avenue Chambers, Southampton Row, W.C.1; Hillboro', The Mount, New Malden, Surrey. Proposed by Wm. Woodward, Edwin J. Sadgrove, William G. Ingram.
- HILL**: JOHN JAMES, Emerson Chambers, Blackett Street, Newcastle-on-Tyne; "Meadowfield," Runnymede Road, Ponteland, nr. Newcastle-on-Tyne. Proposed by R. Burns Dick, A. K. Tasker, Charles S. Errington.
- HORSBURGH**: WILLIAM PETER, F.S.I., D16 Exchange Buildings, Liverpool; 17 Victoria Road, Waterloo, nr. Liverpool. Proposed by Gilbert W. Fraser, Hastwell Grayson, E. Bertram Kirby.
- JOHNS**: EDWIN THOMAS, 8 Lower Brook Street, Ipswich. Proposed by William Eade, H. Percy Adams, Charles Holden.
- JONES**: ALBERT HENRY, Victoria Station House, S.W.; Thurmo, West Hill, Sanderstead, Surrey. Proposed by Geoffrey Lucas, H. V. Lancaster, Edwin J. Sadgrove.
- JONES**: FRANCIS EDWARD, 8 Gloucester Mansions, Cambridge Circus, W.C.2; Beechboro', 189A Park Road, Kingston Hill, Surrey. Proposed by Robert Cromie, Lewis Solomon, H. D. Searles-Wood.
- LYONS**: HENRY JOHN, 14 South Frederick Street, Dublin; The Gables, Seafeld Road, Clontarf, Dublin. Proposed by W. Kaye-Parry, Fredk. G. Hicks, Professor R. M. Butler.
- McINTOSH**: DAVID GORDON, 60 Castle Street, Liverpool; Stivelooms, Heswall-on-Dee, Cheshire. Proposed by T. E. Eccles, E. Guy Dawber, J. A. Gotch.
- MACINTOSH**: HUGH, 1 Imperial Buildings, East Croydon, Surrey; Braeside, Sandy Lane, Wallington, Surrey. Proposed by W. H. Harrison, J. Compton Hall, R. J. W. Newman.
- McLACHLAN**: JAMES, 4 Melville Crescent, Edinburgh; 125 Warrender Park Road, Edinburgh. Proposed by John Wilson, A. Lorne Campbell, J. J. Joass.
- McLAUCHLAN**: STEWART, Royal Liver Building, Liverpool; "Nethway," Rock Park, Rock Ferry. Proposed by Arnold Thornely, E. Bertram Kirby, Hastwell Grayson.
- MATHESON**: DONALD, Tulloch Street, Dingwall, Ross-shire; "The Birches," Craig Road, Dingwall. Proposed by Harry Redfern, F. W. Troup, Basil Oliver.
- MOODEY**: ERNEST EDWARD, 109 High Street, Broadstairs; St. Vincent, Luton Avenue, Broadstairs. Proposed by John Murray, Frank M. Elgood and the Council.
- MORRISON**: JAMES INCH, 24 Duke Street, Edinburgh. Proposed by James A. Arnott, John Keppie, John Begg.
- MURRAY**: JOHN, 56 Chatsworth Road, Luton, Beds. Proposed by Sir Robert Lorimer, J. J. Joass, A. F. A. Trehearne.
- NEWBOLD**: HARRY BRYANT, Stafford House, Norfolk Street, Strand, W.C.2; Chantry Cottage, Hatfield, Herts. Proposed by C. H. B. Quennell, Oswald P. Milne, Herbert W. Wills.
- NURSE**: HARRY, M.C., Borough Engineer and Surveyor's Office, Town Hall, Leigh, Lancs; "Newlands," Great Sankey, nr. Warrington. Proposed by S. Segar Owen, Professor S. D. Adshead, Arthur J. Hope.
- PEARCE**: JOSEPH PEARCE, F.R.Hist.S., Royal Insurance Building, Liverpool; 9 Beach Lawn, Waterloo, Liverpool. Proposed by E. Percy Hinde, Edgar Quiggin, O. D. Black.
- PEMBERTON**: GUY, 120 Edmund Street, Birmingham, and 20A Henley Street, Stratford-on-Avon; Pyeford, St. Gregory's Road, Stratford-on-Avon. Proposed by C. E. Bateman, E. Guy Dawber, Ernest C. Bewlay.
- POMEROY**: ERNEST JAMES, 21 Acresfield, Bolton; "Fairhaven," Harpers Lane, Smithills, Bolton. Proposed by Joseph Foy, John B. Gass, Arthur J. Hope.
- POOLE**: WILLIAM HAROLD, 33 Earl Street, Maidstone; 7 London Road, Maidstone. Proposed by Albert Wm. Smith, William J. Walford, W. H. Robinson.
- POULTER**: HARRY REGINALD, 2 London Road, Camberley, and 27 Buckingham Gate, S.W.1; Collingwood Place, Camberley, Surrey. Proposed by H. Whiteman Rising, William Ravenscroft, Briant Poulter.
- RAVENSCROFT**: FREDERICK ERNEST BRIANT, 16 Friar Street, Reading; "Thornhill," The Mount, Caversham. Proposed by Arthur C. Blomfield, Harry Hutt, H. Whiteman Rising.
- RIMMINGTON**: FRANK, Harrington Chambers, 26 North John Street, Liverpool; "Wynthorpe," Greenhill Avenue, Mossley Hill, Liverpool. Proposed by Arnold Thornely, E. Bertram Kirby, Edgar Quiggin.
- ROWLAND**: HAROLD EVANS, 17 Craven Street, W.C.; The Gatehouse, Purley, Surrey. Proposed by A. B. Knapp-Fisher, J. Edward Still, Harold I. Merriman.
- RUTHERFORD**: JAMES HERVEY, 13 Lendal, York; 4 Clifton Dale, York. Proposed by Walter H. Brierley, William A. Pite, John Stewart.
- SCAIFE**: WILLIAM NIXON, 26 Northumberland Street, Newcastle-on-Tyne; 38 South Parade, Whitley Bay. Proposed by J. H. Martindale, Leonard Stokes, Charles S. Errington.
- SHANN**: FRANK HALLIWELL, 71 Lombard Street, E.C.; 33 Belgrave Road, S.W. Proposed by T. M. Wilson, Maxwell Ayrton, Horace Field.
- SHERVEY**: ALBERT EDWARD, Town Hall, Bournemouth; 18 Stafford Road, Bournemouth. Proposed by J. H. Brewerton, Alfred W. S. Cross, Sir Edwin Cooper.
- SIMMONS**: CHARLES EVELYN, Palace Chambers, Bridge Street, S.W.1; Wyldes Close, North End, Hampstead, N.W.11. Proposed by Dr. Raymond Unwin, Arthur Stratton, S. B. Russell.
- STODDART**: DONALD MCKAY, 266 St. Vincent Street, Glasgow; 41 Kelvinside Gardens N., Glasgow. Proposed by Alexander N. Paterson, John Watson, John Keppie.
- THORPE**: FRED, Union Bank Chambers, Church Lane, Oldham; "The Haven," Grasscroft, Greenfield, Yorks. Proposed by Ernest Simister, Joseph Crouch, W. Alexander Harvey.
- VAUX**: FRED, Danesmoor Chambers, 29 Quay Road, Bridlington; "Methley," Station Road, Filey, E. Yorks. Proposed by Peter Gaskell, G. Dudley Harbron, L. Kitchen.
- WAGSTAFF**: CLARENCE BARNARD, 57 Salter Gate, Chesterfield. Proposed by Percy B. Houfton, James R. Wigfull, Edward M. Gibbs.
- WEBBER**: FRANCIS SIDNEY, 30 Lee Park, Blackheath, S.E.3. Proposed by Arthur Wm. Kenyon, Louis de Soissons, Wm. E. Watson.

WEBSTER : WILLIAM EDMUND NORMAN, 1A New Road, Spalding, Lincs ; "Normacott," Pennygate, Spalding. Proposed by Henry G. Gamble and the Council.

WEIGHTMAN : FREDERICK NORMAN, M.A., 2 Collingwood Street, Newcastle-on-Tyne ; 65 Manor House Road, Newcastle-on-Tyne. Proposed by Godfrey Pinkerton, Jas. T. Cackett, R. Burns Dick.

WEST : ARCHIBALD BULLER, The Knowl, Abingdon. Proposed by N. W. Harrison, Harry Hutt, C. B. Willcocks.

#### AS ASSOCIATES (62).

AIMER : KENNETH WALTER [Special], 423 N.Z. Insurance Buildings, Auckland, New Zealand. Proposed by Robert Atkinson, E. Stanley Hall and the Council.

ALLCORN : WILLIAM JOHN [Final], "The Pinnacles," Shipbourne, nr. Tonbridge, Kent. Proposed by E. Guy Dawber, Herbert Baker, Harold I. Merriman.

ANDREWS : CLAUDE EVERARD ALDINGTON, B.Sc. [Special], 29 Greenhill Road, Moseley, Birmingham. Proposed by George Drysdale, Edwin F. Reynolds, W. Alexander Harvey.

ASTBURY : FRANK NICHOLAS, B.Arch. Liverpool [passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Waverley House, Wolverhampton Road, Stafford. Proposed by Professor C. H. Reilly, F. Barry Peacock, Ernest C. Bewlay.

BAILY : BRUCE WILLIAM SEYMOUR STILES [Special], c/o Mrs. James, St. Dial's House, Cwmbran, Mon. Proposed by J. Leighton Fouracre, A. Southcombe Parker, B. Priestley Shires.

CAMERON : ARTHUR EDWIN [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 18 Eastwood Road, South Woodford, E.18. Proposed by Arthur H. Church, W. Curtis Green, Courtenay M. Crickmer.

CHANNON : GUY DUNSTAN [Special], Red Walls, Malton, Yorkshire. Proposed by Chas. Henry Channon, W. Carby Hall, G. W. Atkinson.

CHATTERLEY : ARTHUR OLIVER, B.Arch. Liverpool [Final], 73 Oriel Road, Bootle, Liverpool. Proposed by Professor C. H. Reilly, Gilbert Fraser, O. D. Black.

CLARK : JAMES CHARLES [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 258 Great Western Road, Aberdeen. Proposed by John W. Walker, J. A. O. Allan, George Watt.

COLEMAN : SAMUEL ERNEST [Special], Ryde Road, Gordon, New South Wales. Proposed by Sir Charles Rosenthal, Harry C. Kent, Col. Alfred Spain.

CONOLLY : HAROLD [Final], Aysgarth, Walton, Wakefield, Yorks. Proposed by G. W. Atkinson, Thomas Butler Wilson, H. S. Chorley.

COOPER : JOHN BRIAN [Final], Public Works Department, Municipal Council of Shanghai, China. Proposed by Professor A. E. Richardson, Dr. Raymond Unwin, R. J. Allison.

CROSSLEY : FREDERICK HAMER [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 15 Arnside Road, Wallasey, Cheshire. Proposed by Professor C. H. Reilly, John Clarke and the Council.

CUTBUSH : PATRICK [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], "Kerri," Arkley, Barnet, Herts. Proposed by Robert Atkinson, E. Stanley Hall, Howard Robertson.

DEAS : THOMAS VICTOR [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Vicarsford, Airdrie, Lanarkshire. Proposed by Col. J. Maurice Arthur, Professor Charles Gourlay, James Loch-head.

FAHY : CONOR PATRICK [Special], 33 Leppoc Road, Clapham, S.W.4. Proposed by Arthur Stratton, Professor A. E. Richardson, Alexr. G. Bond.

FARQUHAR : LUDOVIC GORDON, F.S.A.Scot. [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], St. Margaret's, Bridge of Weir, Renfrewshire. Proposed by Professor Charles Gourlay, John Keppie, John Watson.

FORSTER : EDWARD, B.A. [Final], 1 Leaside Avenue, Muswell Hill, N.10. Proposed by Professor A. E. Richardson, L. S. Sullivan, Oliver Hill.

GALE : DERMOT WILLIAM FAUNTLEROY [Special War Examination], "Minilya," Walsh Street, South Yarra, Melbourne, Victoria. Proposed by Walter R. Butler and the Council of the Royal Victorian Institute of Architects.

GLASHAN : WILLIAM [Passed six years' course at Robert Gordon's College, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 173 Holburn Street, Aberdeen. Proposed by J. A. O. Allan, George Watt, John W. Walker.

GREEN : FRANCIS ERNEST [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], "Alstone," Ealing Road, Wembley, Middlesex. Proposed by Howard Robertson, T. P. Bennett, Gerald Warren.

GREENIDGE : JOHN THEODORE WATERMAN [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 107 Woodstock Road, Oxford. Proposed by Professor A. E. Richardson, C. Lovett Gill, Laurence M. Gotch.

GREGOR-GRANT : GARROW [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 1 Staple Inn, Holborn, W.C. Proposed by Robert Atkinson, Howard Robertson, P. D. Hepworth.

HARMAN : RICHARD STRACHAN DE RENZY [Final], 16 Endsleigh Street, W.C.1. Proposed by Beresford Pite, Ralph Knott, E. Stone Collins.

HUME : BERTRAM STEWART [Final], Echeverria 2790, Buenos Aires. Proposed by E. Lauriston Conder, F. C. Eden, Alexr. G. Bond.

KHAN : HASAN HAYAT [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 35 Bedford Square, W.C.1. Proposed by Robert Atkinson, Howard Robertson, C. Lovett Gill.

KING : JOHN GOULD [Final], 70A St. George's Road, S.W.1. Proposed by Rodney H. Alsop, Herbert O. Ellis, C. E. Varndell.

LANDER : FELIX JAMES [Final], 4 Brampton Road, St. Albans. Proposed by Barry Parker, H. Percy Adams, Charles Holden.

LAWRIE : ROBERT SORLEY [Passed six years' course at Robert Gordon's College, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 12 Claremont Street, Aberdeen. Proposed by J. A. O. Allan, George Watt, John W. Walker.

LEWIS : DORIS ADENEY [Passed five years' course at Architectural Association. Exempted from Final Examination



- after passing Examination in Professional Practice], 41B Belsize Park, Hampstead, N.W.3. Proposed by Howard Robertson, Robert Atkinson, C. E. Varndell.
- LOUW : HENDRIK JACOBUS [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Suider Paarl, South Africa. Proposed by Robert Atkinson, H. V. Lanchester, E. Stanley Hall.
- METCALFE : JOHN ARMSTRONG [Final], Vale View, Wingfield Road, Whitchurch, near Cardiff. Proposed by T. Alwyn Lloyd, Harry Teather, Percy Thomas.
- MILLER : JOSEPH CHARLES [Final], 101 Stanmore Road, Mount Florida, Glasgow. Proposed by Ninian Macwhannell, Professor Charles Gourlay, Andrew Balfour.
- MINOPRIO : CHARLES ANTHONY [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Avening Court, Gloucestershire. Proposed by Professor C. H. Reilly and the Council.
- MOBERLY : SYLVIA GRACE [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 18 Gordon Square, W.C.1. Proposed by Howard Robertson, J. Alan Slater, Major Harry Barnes.
- MORRISON : ROBERT HORN [Passed six years' course at Robert Gordon's College, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 8 Union Terrace, Aberdeen. Proposed by George Sutherland, J. A. O. Allan, George Watt.
- OWEN : JOHN HUGH LLOYD, B.Arch. Liverpool [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 47 Osborne Road, Tue Brook, Liverpool. Proposed by Professor C. H. Reilly, Sir Edwin L. Lutyens, Hastwell Grayson.
- PAGE : WILLIAM PALMER [Special], "Riverslea," King William Street, Greenwich, Sydney, N.S.W. Proposed by Professor Leslie Wilkinson, Sir Charles Rosenthal, Harry C. Kent.
- PARKER : JOHN HERBERT [Final], 12 The Homesteads, Muswell Hill, N.10. Proposed by Walter R. Jaggard, W. Chas. Waymouth and the Council.
- PERCIC : WOLF [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 7 East Tenter Street, E.1. Proposed by Robert Atkinson, Herbert Baker, Howard Robertson.
- RICE : WILFRED JOHN BROOKHOUSE [Final], 34 Kensington Gardens, Ilford, Essex. Proposed by Sir Edwin Cooper, John Saxon Snell, Stanley M. Spoor.
- READ : GEOFFREY ERNEST [Final], "Ashgrove," 134 Church Road, Upper Norwood, S.E.19. Proposed by C. E. Varndell, Robert Atkinson, G. D. Gordon Hake.
- RIX : ALEC DONALD [Final], 2 Salcombe Gardens, Clapham Common, S.W.4. Proposed by Edwin J. Tench, George J. Skipper, Edw. T. Boardman.
- SENYARD : LEONARD [Special], 58 Redcliffe Square, South Kensington, S.W. Proposed by Beresford Pite, W. F. Foster, Sydney H. Meyers.
- SARMA : PURSHOTTAM LAL [Final], The Agra Marble Works Co., Drummond Road, Agra, U.P., India. Proposed by H. V. Lanchester, Fredk. Chatterton, Albert J. Thomas.
- HAW : CHARLES CECIL, B.Arch. Liverpool [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 14B Mortimer Crescent, St. John's Wood, N.W.6. Proposed by Professor C. H. Reilly, W. Curtis Green and the Council.
- SIMPSON : JAMES ROUNTHWAITE MOORE [Special], 33 Northway, Hampstead, N.W.11. Proposed by Professor S. D. Adshead, Edward Warren, Professor F. M. Simpson.
- SMITH : ERIC STEWARD [Final], 76 Elmhurst Road, Reading, Berks. Proposed by I. Arthur Smith, Edward Warren, Harry Hutt.
- STOKES : HORACE WILLIAM [Final], 119 Wills Street, Lozells, Birmingham. Proposed by George Drysdale, Edwin F. Reynolds, G. Salway Nicol.
- TAYLER : KENNETH SEAWARD [Final], 41 Cranbourne Gardens, Golders Green, N.W.11. Proposed by Howard Robertson, Geoffrey Lucas, Robert Atkinson.
- THEARLE : HERBERT [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 42 Wyresdale Road, Aintree, Liverpool. Proposed by Professor C. H. Reilly, E. Bertram Kirby, H. Lionel Thornely.
- THOMPSON : ARNOLD JOHN [Special], 7 Old Court House Street, Calcutta, India. Proposed by Henry A. Crouch, Herbert Baker, David Barclay Niven.
- TOCHER : WILLIAM [Final], c/o J. C. Procter, Esq., 62 Woodhouse Lane, Leeds. Proposed by Robt. G. Wilson, junr., George Watt, John W. Walker.
- TOONE : AUBREY ALFORD GIFFORD [Final], c/o 9 Woosung Road, Shanghai, China. Proposed by Arthur J. Hope, Arthur W. Hennings, John Swarbrick.
- UNWIN : EDWARD [Special], Wyldes, North End, N.W.3. Proposed by Robert Atkinson, Professor S. D. Adshead, H. V. Lanchester.
- WALKER : ARCHIBALD GRAHAM [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 36 Kersland Street, Glasgow, W. Proposed by Geo. And. Paterson, John Stewart, John Watson.
- WILSON : PERCY ROY, B.Arch.(McGill) [Passed five years' course at McGill University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], c/o H. T. Lindeberg, Esq., 2 West 47th Street, New York City, U.S.A. Proposed by Professor Ramsay Traquair, William Carless, Philip J. Turner.
- WINTER : FRANK THOMAS [Special], Holmer Green, High Wycombe, Bucks. Proposed by Edward A. Hunt, William Hunt, Walter R. Jaggard.
- WOOD : THOMAS RUDDIMAN [Passed six years' course at Robert Gordon's College, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 2 Ravine Terrace, Roker, Sunderland. Proposed by A. Marshall Mackenzie, Thomas R. Milburn, W. Milburn.
- WOODGATE : JAMES AUSTEN [Special], Hawke House, Barrack Hill, Hythe, Kent. Proposed by W. H. Robinson, John L. Seaton Dahl, A. Foster.
- WRAY : KENNETH FLETCHER [Final], Strathmore, Conisbro, near Rotherham, Yorkshire. Proposed by Charles E. Varndell, Robert Atkinson, C. Ernest Elcock.
- WRIGLEY : FRED HILDRED [Final], 2 King Street, Wakefield. Proposed by T. Butler Wilson, G. W. Atkinson, W. Carby Hall.

# AS HON. ASSOCIATES (3).

- BRICE : ARTHUR HALLAM MONTEFIORE, J. P., F.R.G.S., Recorder of Tewkesbury, and of the Middle Temple of the Oxford Circuit; Barrister-at-Law, 2 Hare Court, Temple, E.C.4. Proposed by the Council.
- CAMERON : SIR DAVID YOUNG, R.A., R.S.A., LL.D., 40 Queen's Road, St. John's Wood, N.W.8. Proposed by the Council.

SMITH : SIR ARTHUR HAMILTON, M.A., F.S.A., F.B.A., Keeper of Greek and Roman Antiquities in the British Museum ; President of the Society for the Promotion of Hellenic Studies ; Chairman of the Faculty of Archaeology, History and Letters in the British School at Rome ; British Museum, W.C.1. Proposed by the Council.

#### AS HONORARY CORRESPONDING MEMBERS (5).

CORT Y BOTI : CESAR, Principal, Madrid School of Architecture, Segovia 6, Madrid. Proposed by the Council.

GIOVANNONI : GUSTAVO, Professor of Architecture in the R. Scuola d' Ingeneria and in the R. Scuola sup. d'Architettura in Rome, Via Torino 135, Rome. Proposed by the Council.

KEMAL-AD-DIN : PROFESSOR A., Chief Architect to the Moslem Supreme Council in Palestine, Jerusalem, Palestine. Proposed by the Council.

SCIORTINO : ANTONIO, Professor of Arts, Honorary Director of the British Academy of Arts in Rome, 53 Via Margutta, (Palazzo Patrizi), Rome. Proposed by the Council.

STRZYGOWSKI : DR. JOSEF, Professor of History of Art, Vienna University, Horlg 6, Vienna IX. Proposed by the Council.

#### THE ARCHITECTURE CLUB EXHIBITION.

The Third Exhibition of the Architecture Club, comprising Recent Architecture, Architectural Decoration and Architects' Preliminary Sketches, is now being held in the R.I.B.A. Galleries, and will close on Saturday, 14 November. The exhibition is open to the public from 10 a.m. to 8 p.m. Admission 1s., including catalogue.

#### R.I.B.A. SOIRÉE.

To celebrate the amalgamation of the Society of Architects with the R.I.B.A., a Soirée will be held in the R.I.B.A. Galleries on November 13. Invitations have now been issued, and members are requested to notify the Secretary as early as possible if they intend to be present.

#### ELECTION OF MEMBERS.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that, if they wish to take advantage of the election to take place on 15 February 1926, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than 28 November 1925.

#### LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

## Competitions

#### PROPOSED NEW SCHOOL, GOSPORT.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

#### GUISBOROUGH PROPOSED NEW HOSPITAL.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

#### PORTSTEWART GOLF CLUB COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

#### INTERNATIONAL COMPETITION.

The Fédération Internationale du Bâtiment et des Travaux Publics are organising an International Competition with a view to promoting and facilitating the construction of houses for the middle classes and intellectual workers. Prizes to the value of 500 dollars, 300 dollars and 200 dollars are being offered by Mr. Willard Reed Messenger, engineer, of New York, for a memorandum, either in English or French, not exceeding 5,000 words, accompanied by sketches. Particulars of the competition have been deposited with the Secretary R.I.B.A. and can be obtained on application to him at No. 9 Conduit Street, London, W.

#### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

#### LEAGUE OF NATIONS.

#### COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9, Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for



the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of assessors.

### THE NEW INSTITUTE FOR THE BLIND, BUENOS AIRES, ARGENTINE REPUBLIC.

An International Competition has been promoted for the Argentine Institution for the Blind, Buenos Aires, Argentine Republic.

A small number of copies of the Conditions have been deposited in the R.I.B.A. Library for the information of British Architects who may desire to compete.

A booklet containing the full text of the conditions with other information (translated from the Spanish) and a plan of the ground on which the Institution is to be erected is available for inspection at the Department of Overseas Trade (Room 42), 35 Old Queen Street, London, S.W.1.

### PROPOSED NEW COLLEGE BUILDINGS, LIVERPOOL COLLEGE.

Proposed New College Buildings to be erected on a site in Queen's Drive, Mossley Hill, Liverpool. Assessor, Sir Giles Gilbert Scott, R.A. Premiums £500, £300 and £200 are offered. Last day for questions, 30 September 1925. Conditions may be obtained by depositing £2 2s. Designs to be sent in not later than 1 January, 1926.

### AUSTRALIAN WAR MEMORIAL—CANBERRA.

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March, 1926, up to noon, on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

### TOPSHAM PUBLIC HALL COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

The promoters of the above competition have decided to amend the conditions in accordance with the R.I.B.A. regulations and have asked the President to appoint an Assessor.

## Members' Column

### FORMATION OF PARTNERSHIP.

MR. A. H. KERSEY [E.] has taken into partnership Mr. George Alexander Gale, Architect, and Mr. William George Fraser Spooner, Surveyor. The practice will in future be carried on by the firm under the title of "Kersey, Gale and Spooner."

### PARTNERSHIP.

ARCHITECT (young and energetic) in practice, wishes to combine with another to mutual advantage, with a view to maintaining a steadier average influx of work.—Apply Box 2710, c/o The Secretary, R.I.B.A., 9, Conduit Street, London, W.1.

### PRACTICE FOR SALE.

ARCHITECT (F.R.I.B.A.) with official surveyorship appointment, would dispose of his practice (retaining official appointment in another centre). House (1820) with offices and large garden in centre of provincial town, 50 miles from London. Work in hand for £20,000 new buildings for 1926. Advisory help given for next 12 months.—Apply Box 4526, c/o The Secretary, R.I.B.A. 4,000 gns. lowest price taken.

### OFFICE EFFECTS FOR SALE.

THE WIDOW of a late member is anxious to dispose of the Office Effects of an Architect and Surveyor. Included therein are the following:—A Surveyor's Level (by Archbutt) with Tripod; Measuring Telescopic Staff; good case of Drawing Instruments; Office Table with Drawers; Drawing Boards, Tee Squares, etc., etc. They can be seen by appointment on application to Mrs. Margetts, 67 Wakeley Road, Rainham, near Chatham, Kent.

### PARTNERSHIP OR PRACTICE WANTED.

L.R.I.B.A., A.I.Struct.E. (30) London trained, 5 years' experience in America wants partnership or to buy practice anywhere in British Isles (London and Liverpool excepted, preferably coast town). Experience in factory and British and foreign domestic work. Undeniable references. Moderate guaranteed minimum return per annum. Capital available.—Box 1525, c/o Secretary, R.I.B.A., 9 Conduit Street, W.1.

### CHANGE OF ADDRESS.

MR. GERALD SHENSTONE [A.] has moved his Office to No. 38 Bedford Place, W.C.1, and his new Telephone Number is Museum 3621. He would be glad to receive new Trade Catalogues at this address.

MR. PHILIP S. HUDSON, A.R.I.B.A., has resigned his position with the Willesden District Council on his appointment as Assistant Architect in the Public Works Department, Shanghai.

MR. JAMES BURFORD has changed his address to 3 Staple Inn, Holborn Bars, W.C.1.

MR. HERBERT KENCHINGTON [A.] has removed his London Office to 44 Bedford Row, W.C.1. Telephone, Chancery 7174.

MR. H. A. MOBBS has changed his address to 10 Ruskin Avenue, St. Giles, Lincoln.

MR. JAMES A. WILLIAMSON [A.] has changed his address to "Holmwood," Corstorphine, Edinburgh.

### APPOINTMENTS WANTED.

ARCHITECT'S ASSISTANT, A.R.I.B.A., shortly disengaged, seeks London post. Has had good experience with well-known architects in City office buildings, domestic work, and surveys. Efficient draughtsman and good designer; keen; salary moderate.—Apply Box No. 1810, c/o Secretary, R.I.B.A., 9, Conduit Street, W.1.

### APPOINTMENTS VACANT.

AN ARCHITECT who has work to do of the value of over a quarter of a million requires a fully qualified managing assistant with experience in schools and public institutions and with a possible view to a partnership.—Apply to Box 2410, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

### OFFICE ACCOMMODATION WANTED.

GOOD ROOM wanted in West End by an Architect as office with use of telephone and clerk.—Apply Box 3254, c/o The Secretary, R.I.B.A., 9 Conduit Street, W.1.

### R.I.B.A. TELEPHONE NUMBERS.

Members are requested to note that the R.I.B.A. Telephone Exchange lines are now "Mayfair," 434 and 435. The use of the line number "Mayfair, 6543" has been discontinued.

# Minutes I

## SESSION 1925-1926.

At the First General Meeting (Ordinary) of the Session 1925-1926, held on Monday, 2 November 1925, at 8.30 p.m., Mr. E. Guy Dawber, F.S.A., President, in the chair.

The attendance book was signed by 77 Fellows (including 28 Members of the Council), 35 Associates (including 6 Members of the Council), 21 Licentiates (including 4 Members of the Council), 5 Hon. Associates and a large number of visitors.

The Minutes of the Meeting held on 22 June were taken as read, confirmed and signed as correct.

The following members, attending for the first time since their election or transfer, were formally admitted by the President:—Guy Pemberton [F], J. A. Coia [A.], Duncan A. Campbell [A.], H. G. Avery [L.], C. McArthur Butler [L.], B. C. Dexter [L.], Ernest J. Hammond [L.], J. Inch Morrison [L.], H. G. Rovedino [L.].

The Secretary read the names of candidates nominated for election on 30 November 1925.

The President delivered the Inaugural Address of the Session.

On the motion of Sir Frank Dicksee, President of the Royal Academy (Hon. Assoc.), seconded by Sir Reginald Blomfield, R.A., Litt.D., F.S.A. [F.], a vote of thanks to the President for his Address was passed by acclamation.

The President briefly expressed his acknowledgments.

The President unveiled and formally presented to the Royal Institute the portrait of Mr. J. Alfred Gotch, F.S.A., Past-President, painted by Mr. T. C. Gotch, and moved a vote of thanks to the painter. Mr. J. Alfred Gotch seconded the vote of thanks. Mr. T. C. Gotch expressed his thanks to the meeting.

The President presented the R.I.B.A. Medal and Diploma for the Best London Street Frontage, 1924, to Mr. F. H. Greenaway [F.] and Mr. J. E. Newberry [F.] for their building, the Auctioneers' and Estate Agents' Institute in Lincoln's Inn Fields.

Mr. Greenaway and Mr. Newberry briefly expressed their thanks.

The meeting closed at 9.50 p.m.

## SECRET COMMISSIONS.

William Joseph Riley, junior, manager of the Yote Time Recorder Co., Four Oaks, Birmingham, was charged at Sunderland with an offence under the Prevention of Corruption Acts, 1906 to 1916, and the magistrates imposed a fine of £20 and 10 guineas costs. The prosecution was instituted by the Bribery and Secret Commissions Prevention League.

Outlining the case, counsel said that Messrs. W. and T. R. Milburn, architects, Sunderland, were employed by Messrs. C. W. Wilson and Sons, Ltd., glass merchants, to prepare plans for a new factory and warehouse in Castle Street. In the ordinary course of post Messrs. Milburn received a letter from the defendant suggesting the use of their time recorders, asking for the name and address of the owners, and offering a 5 per cent. commission on any sales that might result. Messrs. Milburn brought the matter before the R.I.B.A., and these proceedings were started by the League.

Arrangements have been made for the supply of the R.I.B.A. JOURNAL (post free) to members of the Allied Societies who are not members of the R.I.B.A. at a specially reduced subscription of 12s. a year. Those who wish to take advantage of this arrangement are requested to send their names to the Secretary of the R.I.B.A., 9 Conduit Street, W.1.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

## R.I.B.A. JOURNAL.

*Dates of Publication.*—1925: 7th, 21st November; 5th, 19th December. 1926: 9th, 23rd January; 6th, 20th February; 6th, 20th March; 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.

## Contents for 7 November, 1925

	Page
Portrait of the President .. .. .	To face 1
The President's Inaugural Address .. .. .	1
Vote of thanks by Sir Frank Dicksee and Sir Reginald Blomfield .. .. .	7
Unveiling of Mr. Gotch's Portrait .. .. .	9
Presentation of the R.I.B.A. Street Architecture Medal. <i>Illustrated</i> .. .. .	11
The Sociological Basis of Architecture. By Stanley C. Ramsey .. .. .	12
Reviews:	
Old English Houses. By Theodore Fyfe .. .. .	19
Correspondence:	
The American Institute of Architects and Waterloo Bridge. By D. Everett Waid .. .. .	20
Registration. By Harry Barnes .. .. .	20
Exhibition of War Memorial Models and Photographs. By Charles Ffoulkes .. .. .	20
Sir John Soane. By H. J. Birnstingl .. .. .	20
Lighting of Picture Galleries. <i>Illustrated</i> . By S. Hurst Seager .. .. .	20
Third Exhibition of the Architecture Club. By Darcy Braddell .. .. .	22
Allied Societies:	
Wessex Society of Architects .. .. .	23
Liverpool Architectural Society .. .. .	23
R.I.B.A. New Class of Subscribers .. .. .	24
Board of Architectural Education .. .. .	24
Notices .. .. .	25-30
Nomination of Members .. .. .	25
Competitions .. .. .	30
Members' Column .. .. .	31
Minutes .. .. .	32



# Journal of the Royal Institute of British Architects

THIRD SERIES

VOL. XXXIII. No. 2

21 NOVEMBER 1925

## Contents for 21 November 1925

	Page
DRAWING FOR SCENERY. BY GIUSEPPE GALLI DA BIBIENA	
(From the R.I.B.A. Collection) .. .. .	To face 35
THE ARCHITECT AND HIS CITY. By Dr. Raymond Unwin .. .. .	35
Discussion .. .. .	45
REVIEWS :	
East Kent Regional Planning Scheme, Preliminary Survey. By H. V. Lanchester .. .. .	51
Het Moderne Landhuis in Nederland. By Walter H. Godfrey .. .. .	52
CORRESPONDENCE :	
Lighting of Picture Galleries. By Percy J. Waldram .. .. .	52
The Auctioneers' and Estate Agents' Institute. By E. W. Blake .. .. .	52
Old Bells in Ancient Churches. By A. R. Powys .. .. .	52
WATERLOO BRIDGE :	
Sir Edwin Lutyens's Report to the L.C.C. .. .. .	53
Sir Reginald Blomfield on the Report .. .. .	54
THE SELECTION OF STONE FOR BUILDING. By A. P. Laurie .. .. .	55
RECONSTITUTION OF THE BOARD OF ARCHITECTURAL EDUCATION .. .. .	56
TOWN PLANNING SCHEMES .. .. .	57
OBITUARY :	
Mr. A. C. Thomson .. .. .	57
R.I.B.A. SOIRÉE .. .. .	58
ALLIED SOCIETIES :	
Liverpool Architectural Society. Presidential Address .. .. .	58
Northern Architectural Association. Presidential Address .. .. .	60
NOTES FROM MINUTES OF COUNCIL MEETING OF 2 NOVEMBER .. .. .	61
A.B.S. INSURANCE SCHEME .. .. .	62
NOTICES .. .. .	62
COMPETITIONS .. .. .	62
MEMBERS' COLUMN .. .. .	64
MINUTES .. .. .	64



DRAWING FOR SCENERY. BY GIUSEPPE GALLI DA BIBIENA  
From R.I.B.A. Collection





WINCHESTER T.C.

Stanmore Housing Scheme. Architect: W. Curtis Green, F.R.I.B.A.

## The Architect and His City

BY DR. RAYMOND UNWIN, F.R.I.B.A.

[Read before the Royal Institute of British Architects on Monday, 16 November 1925]

I HAVE found in that remarkably interesting rectorial address delivered by the Prime Minister recently some confirmation of the feeling which impelled me to adopt to-night's subject; the feeling that there is need to direct attention to the special sphere of art in city building; for in the fairly full description which the Premier gave of the types of men trained in our Universities, the artist found no place, though there is an allusion to the art of speech. This omission, I fear, is only too representative of a British specialisation, which, as regards the sphere of my work at least, I am convinced we carry too far. Consequently in the councils of our modern city builders, the voice of the artist is too seldom heard; the value of the advice which he might give is too little understood; and the character of the work accomplished is suffering in consequence.

It would be as easy to criticise our civic authorities for not consulting the artist more frequently, as it would to blame artists or architects for failing

to qualify themselves fully to undertake housing and town planning work. Such recriminations are seldom profitable. In a democratic country the authorities must reflect the attitude of the citizens, and men will naturally neglect branches of work which they are seldom invited to undertake. Moreover, in this case the default is part of a deeper schism in our society; and it is questionable whether the fullest recognition by each party of the beam which obscures their own vision, and the mere mote from which the other party suffers, would suffice to mend matters. For there has grown up during the progress of modern industrial civilisation an unprecedented degree of misunderstanding and estrangement, between two sections of the community, endowed with different temperaments and faculties; for simplicity we may call them the practical men and the artists; though it is difficult to use the latter term without calling up a vision of the landscape painter or the maker of pretty trifles, so thoroughly have the artists

been squeezed out of their proper place in the main affairs of the community.

For good city building the estrangement between these two types of men is disastrous. I suspect it is equally so in other spheres, and that it is in no small degree responsible for the serious condition of chaos into which our industrial affairs seem to have drifted.

Every observant visitor to America must realise that this condition is causing no less anxiety in that new country, reputed so wealthy, than it is in the older and more war-impoorished lands nearer home. It is authoritatively estimated that less than one-third of the families in that rich land have an annual income reaching the 1,700 dollars necessary at their prices and high standard to meet what the United States Department of Labour calls "a minimum budget of health and decency." Yet estimates assess the waste of man-power and natural materials in the industry and commerce of that country at figures so high that I hesitate to quote them.

Mr. Hoover, who did so much to feed us during the War, has stated that even the degree of order and planning introduced by the much abused war control, with 20 per cent. of the best man-power withdrawn into the Army, resulted in a 20 per cent. greater volume of commodities being produced. When, driven by the acute post-war house famine, he investigated the building industry, he discovered that seasonal fluctuation was equivalent to having nearly one-third of the man-power in the industry always unemployed. As a result of his discovery this waste is being rapidly reduced by better planning of the sequence of work.

There is only too much reason to fear that we are little better off, though we still wait for our Hoover and his band of investigating engineers to reveal the weak spots. Let me remind you of the thousands of families here still wanting decent homes, because enough men cannot be found to build them; yet over a million unemployed have tramped out streets for years seeking work. If this paradox does not cap those to be found across the water, it is at least forcible enough to check hasty thoughts of superiority.

Never perhaps was the need for dwellings and the other products of industry greater throughout the world than it is to-day; never probably was there so extensive equipment or such latent power of production; yet how difficult seems the task of applying that immense power to satisfy those

urgent needs. Why is this, and why you may well ask should it be recalled now? The reason is that, like the modern cities with which we are concerned to-night, industrialism has developed haphazard, lacking order, lacking design. Now in city building these are the very qualities which we know it is the function of man's artistic faculty to contribute. I fear the deficiency of that contribution in the sphere of city building is but part of a general neglect. For the industrial age having smothered man's natural hunger for beauty in a mass of material production, has lost the ability to understand the artistic temperament or to appreciate its proper function in human society.

Let me say at once that seeking recognition for the place of the artist implies no want of appreciation for the qualities of what we have called the practical man, meaning thereby fortunately the majority of mankind, nor any undervaluing of the importance of all that he contributes to our life. The very existence of civilised well-being depends on these same practical men, engineers, men of business and the like, carrying on their activities and perfecting their methods. It is their persistence which has carried forward the processes of production, it is their faithful labour which has erected the edifice of industrial civilisation, building it up stone by stone, testing the firmness of each step before the next is taken. This is their function and their method, and it is invaluable. But it is not all, it is not enough. We know that it is just in this manner that our industrial towns have grown to be what they are. Building added to building, street to street, without general plan; each want satisfied as and where it arose. Hence the confusion. There has been no vision of the artist to precede and guide the building of the practical man.

The temperament called artistic is difficult to define, and frequently misunderstood; it includes, in greater or less degree, the imagination to see visions of what might be, the desire to realise them, and the power to give clear expression to them. It constitutes one of the most practically valuable gifts with which man can be endowed, if according to the degree and character of the endowment its possessors can be made to play their proper part in the human community.

The full faculties needed for creative work in the fine arts are, however, possessed by very few of





CITY OF BRISTOL  
Fishponds Housing Estate. By a Panel of Architects.



CAMBERWELL M.B.C.  
Carried out by His Majesty's Office of Works

those who share the temperament. Unfortunately, the fact that there are a few who not only see visions of great beauty, but have the exquisite power of expressing them in so called works of art, has led to the assumption that these forms of expression are the only ones appropriate for the artist; and that it is the duty of all those who share the endowment, shunning practical affairs, to seek, however imperfectly, to express themselves in one or other of the fine arts. Hence we see hundreds of those who have been blessed with some moderate degree of artistic gifts wasting their lives in the production of second-rate pictures or art fancies! Meanwhile the practical affairs of the community lack the inspiration and design which their imagination if properly trained might well have been adequate to contribute. It is small wonder that the artists standing or thrust aside from the main streams of life have too often been content to play in the eddies; and at times in mischievous mood to tease the rest of society by persuading them to accept jazz patterns for great paintings, and for statuary human effigies compiled from the child's box of bricks.

The terms artist and practical man represent no complete or scientific division; most men enjoy in some degree and may learn to use the faculties of both; otherwise where would the architect be! Nevertheless, the terms do represent with sufficient accuracy a specialisation of temperament, of faculty, and of methods of work, the understanding of which is necessary for co-operation between the two types of men, as its appreciation is important for the public. The clear advantage of such specialisation and co-operation is not diminished by quoting rare examples of the practical artist or the imaginative engineer. Most men, being creatures of but limited powers, can only reach a decent level of competence by specialising in the use of those faculties with which they have been more generously endowed. It is the co-operation of such men that in some degree compensates for the general absence of the superman. The danger of this plan arises when men specialise for too much separation in their spheres of work, instead of specialising for co-operation in the same spheres.

Without attempting exact definition, we associate especially with the artistic temperament or faculty, the power to see that which is not there, to call up visions of what might be. An example

of method may best illustrate what is meant. The planning of a cottage home is generally thought to be very simple. The ordinary person supposes that the plan is the result of following a few easily learnt rules, coupled with regard for sundry "dons"; that a short list of requirements can be made, and that by a system of modification, trial and error, ticking off the points as dealt with, the design can be compiled. These methods have their place no doubt, but it is not thus that real designs emerge. The truth is that the problem, far from being simple, is as complex as the family life which the dwelling is destined to accommodate. Every room should have its appropriate aspect, size, shape and relation to the other parts of the house. Ready inter-communication must be provided without involving sacrifice of space in the building, loss of comfort in the rooms, or waste of time to its future occupants. Each room in turn must have its door, window, fire, and other parts in right relation and arranged to leave suitable spaces for furniture. All this must be kept within strict limits of cost; and in addition to being convenient in use and comfortable to rest in, the building should be pleasing to look upon; which means that its mass must set happily on the site, and its colour harmonise with its surroundings; that the plan shall be one which will roof well and light well, and that the proportions of all the external parts shall so harmonise that the whole design will look well.

It will be realised that in the making of such a design if the place, size or form of any part is modified a score more parts will need to be adjusted to restore the right relation or the balance of the composition; a tedious process, and little likely to succeed on the compilation method. How, then, does the artist work on such a problem? When he comes upon the site, as Kipling expresses it, "he makes a magic"; and as he intently meditates on the problem there rises before him an image of the cottage that is to be. He sees the spot where it should stand, the form and colour which will best fit into the picture. He sees, too, the opportunities for use and enjoyment which the site affords, and watches the life being lived there. He does not try to remember, one by one, the innumerable "do's" and "dont's"; for should he be tempted to put the door, window and fire in wrong relations,



he would see the cook standing in her own light, or the door swinging irritatingly against the easy chair in which the occupant was trying to read. Instead of the ineffective compiling of details, the artist holds the plastic design suspended in his imagination while he studies it and moulds it, seeing by an instantaneous series of pictures the effect on the exterior view of each internal modification, working the details of plan or elevation with the whole always visible in the back of his mind to help him and check him. This process of design is frequently swift in working, for imagination acts by flashes; but it is not easy, and needs both training and a special kind of knowledge. To create the pictures the mind must be stored with the properties which compose them. The requirements, the conditions and, in this case, the life of the occupants, must be so thoroughly and sympathetically understood as to have become almost an instinctive equipment.

You may think that I have over-elaborated this simple process; that most of the possible combinations both in plan and design have been explored and tested, and that the sites on which cottages have to be erected offer few opportunities of any kind, except as regards such sunlight as the state of our atmosphere and the heights of adjacent buildings may allow to fall on our dwellings. You would be astonished how frequently even this important opportunity is overlooked: how many houses are still being built with sunless living-rooms and sun-baked larders. But let us carry the matter a stage further. Consider the laying out of those dreary sites which offer so few opportunities; instead of compiling the plan by adding plot to plot and street to street in obedience to the practical considerations of so-called profitable development, thus effectively destroying any valuable opportunity of convenience, pleasure or beauty which the site offered, suppose there could be brought to bear on that initial stage of laying out the same kind of imagination the same magic of design; need it any longer be true that the cottage sites offer no opportunities? That a few more houses should be crowded on the estate is no doubt an important practical consideration, but how supremely unimportant it really is compared with the destruction of the beauty of the land, and of the possible pleasure of living upon it, which may easily result!

If any imagination, even faintly endowed

with the artistic faculty, had been present to see what might be, can we for a moment believe there would have been that which, alas, we find in the many square miles of dreariness and squalor which constitute so large a section of all our modern towns?

If in the planning of the cottage or the lay out of a building estate, we see that scientific knowledge and methods of compilation cannot without the aid of the imagination of the artist prove successful, in the wider sphere of town planning, the difficulty of compilation and the need of imagination are not less, but greater.

Hitherto the work of town planning has suffered for want of clearer understanding, even on the part of those well versed in the subject, of the difference of faculties and methods needed for success. If the practical man has sometimes thought that complete mastery of the science of the subject would suffice to enable him to practise that which is as much an art as a science, it must be admitted that the artist has at times also imagined that his training and his art have forthwith qualified him to become a planner of towns, forgetting that this particular art is based on an extensive science, which must be at least understood. The artist may, indeed, have trained his imagination and possess the faculty of design; but before he can design a city plan he must master the subject. The knowledge he needs is not merely that of the barrister getting up his case, though he, too, will have many briefs to study; nor, on the other hand, is it the complete and scientific knowledge of industry, commerce, land values, drainage, road construction, etc., which the economist, the valuer, or the engineer must possess; though a general familiarity with all these is required. What the artist specially needs is a sympathetic insight into all the relationships of city life, a realisation of the reactions which take place between the city environment and the human society which it clothes and expresses. He needs, in fact, that particular range of knowledge which will enable his imagination to picture the city as it might be, to see the life of the people going forward in it, to see all the different parts and functions in their true relation. He needs this that he may be able to study his vision effectively and mould it to meet the realised conditions, or modify it to avoid the apprehended difficulties. The kind of knowledge needed is extensive rather

than intensive; for there must be maintained a degree of detachment from the details of the problem if the city and the life of the city are to be seen fairly and seen whole. The town designer must prepare his imagination for this work by watching and thinking over the phases of city life; meditating on their comparative manifestations in many towns; entering sympathetically into the needs and limitations, musing all the time on visions of how work might be made more efficient and town life more pleasant.

In every case there is much preparation to be done; thorough knowledge of that which is must precede and be the basis of useful visions of that which may be. That knowledge we speak of as the survey; in order that it may be adapted to the designer's method, it should be set out as far as possible in graphic form. After the artist has expressed his vision much will remain to be done in preparing the design for practical execution. What I urge is that the function of the artist, the stage of design, shall not be overlooked. Let the preparation be as scientific and as complete as may be; when the actual planning stage is reached there is need for the imagination of the trained designer to lay hold of the multitude of conditions, conflicting interests and requirements, and with a vision of the city life always present as a guide, to appraise them at their relative value. The designer will study his site, picture its opportunities for work, for business or for play, and will mould the vision of the ideal city until it satisfies the needs and is itself so harmonised with the natural features of the land, that city and site become welded into one conception, a complete design. This, it seems to me, is the special contribution which the artist has to make to city building; he must contribute the vision of what the city might and should be, and translate that vision into the design through which it can be realised.

The practical man or engineer, already versed in all the sciences connected with town planning, if he has the necessary artistic faculties, may cultivate them until he becomes also a master of design and creator of beauty. The artist or architect already trained in design may study the economic and engineering problems and become also a master of the sciences of the subject. Either may cover the whole field of work if he is possessed of all the necessary powers. But it must be recog-

nised that faculties are lavished on few men with such liberality; and that the methods of work are so different that the practise of either may render more difficult success in the other. The detachment from much detail and the free use of imagination which are essential for the designer may well be dangerous for the engineer. The necessary concentration of the constructor on the perfection of his detail and the security of each stage of his edifice may tend to restrict the freedom of imagination which is the designer's greatest help.

It is the need for the different faculties for which I plead, and because they must mainly be assembled through co-operation I look for a greater measure of mutual appreciation of function and method. The practical man must realise that his work will be worth much more if it is guided by the comprehensive vision, the co-ordinated design. The artist must recognise that his vision to be of service, his design to be practicable, must be conditioned by the limits of what is and what is possible, which the scientist or the engineer may determine. There is little use dreaming of lakes in a land where the water supply available does not equal the evaporation.

I seek then to enlist your help in this project of mutual understanding between the artist and the practical man, between the man who sees what might be and the man who knows what is.

As architects we have perhaps a special opportunity to help towards this better understanding; for our work touches both the artistic and the practical. If our buildings occasionally have pinnacles they must always have structural stability. If at times we reach up with the artist to the beauty of the clouds, we are compelled with the practical men to keep our feet firmly planted on mother earth; and the visions which our spirits may gather in those higher regions serve but to help us more fittingly to solve our practical problems. If, as the distinguished Finlander Saarinen recently expressed it, our function is "to create harmony and beauty on a foundation of the practical," we should, through understanding something of the temperaments and experiencing the methods of work of both the artist and the practical man, be in a position to help each to a greater understanding and better appreciation of the other.

I suggest that as the need for this is urgent, so the time is not inauspicious. Mere materialism





LESS SUCCESSFUL DESIGNS



MANCHESTER C.B.  
Typical Artisan Houses, built in 1895

is losing something of its hold. Science, so long its main support, seems busy now knocking away the props, and, breaking through former bonds, it is reaching out to new spheres of knowledge and experience less and less distinguishable from the spiritual.

Dissatisfaction with the results of a civilisation of quantity, and economic pressure are alike forcing the more civilised countries to give greater attention to quality. It is becoming clear, at least, that prosperity will not much longer be attainable by selling large quantities of indifferent products to the more backward peoples. The quantity business is so easy to learn, and they are all rapidly acquiring it.

Apart from the disillusionment, and the searching for wider co-ordination, which have been referred to as noticeable in America, many other signs that a change is taking place in the scale of values may be noticed in that land to which we look for forecasts. Perhaps it is enough to refer here to the wonderful development of architecture, and the increased respect shown for it. When even the rampant demon of advertisement hides his diminished head in the presence of dignity like that of a Pennsylvania Railway station, one realises how great a change has already come. A desire for order and for quality, a love of beauty, in short values of a more spiritual character are gradually re-asserting their influence.

In the rapid spread of organised efforts for housing and town planning in many lands, we recognise a similar weariness of confusion and the haphazard, and see that the desire for harmony and for planning are making themselves felt. If the signs of change are generally auspicious, here in our own land the local conditions are favourable for the project.

After strenuous and long sustained efforts to build enough houses to relieve the shortage, at last one can feel that progress has been continued on a steadily accelerating scale long enough to have acquired considerable momentum, and it becomes possible to give more attention to other aspects of the work than the mere increase of quantity; possible also to hope that greater care and attention will now be devoted, both centrally and locally, to the wider subject of town planning. The first post-war assisted housing scheme spent itself towards the end of 1922. That scheme resulted in building about 215,000 houses. In 1923 Mr.

Chamberlain, the present Minister, introduced the second great effort to stimulate building, under which 122,719 houses had already been completed on the first of October. The number of houses finished and the number under construction have grown steadily month by month, until over 10,000 were completed in the month of September and over 70,000 were in course of construction, under the various schemes of financial assistance, by the Government or the local authorities. To these must be added the houses built without assistance. During the last period for which there are records they accounted on the average for over 5,700 more per month. Assuming this rate to have been maintained, a total of over 15,700 houses will have been completed during the month of September. This is city building on no small scale. From returns published in the *Labour Gazette*, this great housing effort appears to represent over two-thirds of the total value of the buildings of all kinds erected by the building industry. American figures confirm this proportion. It is hardly too soon to inquire how much of this work has benefited by the co-operation of the artist and the practical man. How much of it adorns, how much disfigures our land? The answer is not easy to find.

When the first housing scheme was launched after the war, with a view to overcoming any local inertia, an arrangement for financial assistance was adopted which necessitated close supervision and guidance by the Central Government. Standards of health, accommodation, and design were set; and a continuous effort was made to reach and maintain those standards. In the process, as was perhaps inevitable, the unlimited financial liability of the Central Government at a time of very high prices, led to a degree of supervision harassing to local authorities and their architects, and tending to undermine their sense of responsibility and diminish their interest and pride in the work.

When the second effort was made in 1923 the reverse arrangement was adopted; the central authority undertook a limited financial obligation only, and laid down but few and general conditions. The margin of financial liability was left with the local authorities, and a degree of freedom from central supervision commensurate with the new position was given them. Their proposals and their estimates of costs are generally approved, but plans of lay-out and of houses are not sub-



mitted to the Ministry of Health, except in the case of difficulty as to cost, or other special circumstances. You will see, therefore, that the responsibility for the standard of accommodation, comfort and design of the houses no longer rests on the central authority, but is mainly a local one.

What has been the average result of this change, and what it will be in the future, are matters of no small moment. Much that I see inspires me with hope; in many places excellent work is being done, the greater freedom has been pro-

happening in some places! Cases have come under notice reproducing many of the worst evils of the nineteenth-century industrial town builder: A layout devoid of interest or merit, plans inconvenient and uncomfortable, aspect neglected, north living-rooms and south larders; and, as might be expected in such cases, elevations consisting of incongruous features unhappily combined.

This ought not to be; it is little better than wilful waste that we should to-day be using our inadequate resources to such ill effect. That we



NEWBURN U.D.C.

Architects: Adshead and Ramsey, FF.R.I.B.A.

fitably used. I know of cases where recent housing estates have been well laid out and are being covered with houses which in design will bear comparison with our beautiful traditional cottages, and in comfort and sanitation far excel them; which, moreover, do not exceed the present average prices, proving that good design, though costly in thought and care, need not be expensive in money. But I see also much which falls short of this standard, and no little that inspires apprehension as to what may be

should still be destroying the remaining beauty of our land by development such as described can only be regarded as spendthrift extravagance. And what of the wider field of town and of regional planning? Here, too, I think conditions are favourable for an advance along the lines suggested. It is true that in this case much of the science still remains to be discovered; many of the economic tendencies and practical requirements, many of the methods for reconciling conflicting interests and giving effect to proposals have still to be worked

out. Nevertheless, a great deal has been accomplished—309 local authorities are engaged in making town planning schemes; 32 regional committees are co-ordinating the work of wider areas, covering in all nearly 8,000 square miles. On the basis of the science and technique so far evolved plans are being made. Whether that basis has or has not acquired something of final form, it is equally important that the imagination of the artist should play its part in forming these plans. I do not complain that since 1909 we have concentrated our main attention on the practical problems which have to be dealt with, much less desire that the labour on these problems should be relaxed; the method is natural to us as a people, and it is a good method; it is one, moreover, which has been found very helpful to other countries whose natural methods are different. But it is not the whole; and I do suggest that the time is now ripe when we may with real economy add a little more creative vision, more of the design which leads to order and beauty than we have hitherto attained in our plans. I say this the more confidently because some of the work already carried out is proving that order and design, proportion and relation are not valuable only for their contributions to beauty, but that without them even the practical utilities may break down. The road junction which merely provides sweeping lines for the traffic on plan, when built up may prove confusing to the human mind, for want of such order, such symmetry, such design in the forms of the sites, and the groups of the buildings as would explain the junction to the approaching drivers. Some people always imagine that art or design consists in sacrificing important practical considerations for the sake of mere appearance. On the contrary, the ignoring of art, of design, too often means sacrificing the only supremely important considerations to a few petty practical details; as when all that makes a place worth living in is destroyed for the practical advantage of crowding a few more people into it!

No such natural conflict, in fact, exists; the practical and the artistic are two aspects of one purpose, and both are equally necessary to successful attainment; without the other each alike is maimed.

I have already suggested that, as architects, we may contribute to secure co-operation among those who help in city building. But what about

the general public; can we do nothing to stimulate in them, and find expression for, that natural desire for beauty of surroundings which has been almost universal since the earliest dawn of civilisation? I suggest that we can; that we each have a special duty to our own city; and that the only influence at once sufficiently widespread and potent is the influence of the home.

It is natural, and it is well, that all young architects should aspire to play a distinguished rôle in their profession, to design the greater buildings for which monumental character is appropriate. But even that more distinguished work must in the long run depend on the appreciation of the public; and I suggest for your consideration that house building, which as we have seen far outweighs all other branches of work in volume and in value, also exceeds it in the influence which it exerts on the minds of the people, and in the extent to which it may contribute to or ruin the beauty of cities. That eminence may be reached in this work needs no proof in the presence of our honoured president; that lasting fame may also be found, the names of the brothers Adam testify.

The work, too, excels in human interest and in the number of contacts which it establishes with every branch of communal life. If you become really interested in the house you cannot stop there; you will be led to think of its surroundings, of the laying-out of the sites, provision for recreation and the enjoyment of life, preservation of the natural amenities or the creation of new ones. You will thence find yourself involved in wider and wider interests until all the questions of town planning and city building are brought within the sphere of your attention. Ultimately you will reach the goal of the monumental building, but will see it not as a detached project for a competitive design, but as a point of climax in the city plan. Your approach through the long avenue of city life will reveal such buildings in better perspective, and in truer relation to their neighbours. You will realise through that approach, as others cannot, the background of the city against which all its important and its public buildings stand forth, to adorn it and express its activities.

If there is even a measure of truth in my view that this approach to architecture from the dwelling is best for the architect, and that the interest and appreciation of the people can best be stirred



in their home whence it will spread in widening areas until it embraces the whole town, then I suggest that in our architectural training greater emphasis might be laid on this work. Let every student study the life of the home and learn to plan and design the small house thoroughly; let him follow this with some study of the combination of small houses into buildings composed of two, three, four or more dwellings, and the further combining of these larger units both in plan and elevation into more extensive groups, developing by the arrangement architectural relations and unity, in harmony with the contours or other features of the ground. This affords a truly fascinating field of design which few have yet explored, and fewer mastered. From this he will proceed to the development of sites and their relation to the town plan; when in due course he comes to exercises in monumental design he will at least have some idea of their place in the city, and the background against which they should stand. Incidentally, as our schools must turn out many architects whose opportunities for monumental work will be long in coming, and some whose gifts do not qualify them for such work, we shall at least have trained numbers of men better qualified to occupy that almost limitless field of house building and city planning which offers ample scope for men of very varying talents.

Finally, we must not forget that, be we artists or be we practical men, we are citizens of our town or village; and to the extent that we are specially qualified to judge in such matters, are the more responsible as trustees for posterity that our city is handed down to them with its

treasures intact and its beauty preserved or restored. Therefore let us get together in ways appropriate to our local circumstances. Our president made an admirable suggestion in his address, which will suit many places. In one town I know excellent work is being done on another line; the resident architects form a panel under the leadership of one of their number who acts as consultant to them and to the town council, co-ordinating their work and advising the authorities. He apportions the building among them, himself doing no building, but co-operating with the authority and their engineer in the town or site planning.

From the high average of work resulting, I judge the arrangement to have no small educational value for the architects, as it certainly confers much benefit on the city. There are many ways in which the influence of the architect may extend. The first and the one most under our control is a thorough knowledge of the work and what is required. That is not all; but it is our part and I say to the younger architects and the students, if you will so qualify that you can do this work sufficiently well, there is to-day a better chance than has existed for many a year, that the opportunity to work towards the improvement of the homes and the beautifying of the city will come to those who are ready for it. For it can hardly be doubted that we are entering a period of planning and co-ordination of work in many spheres, a period when I believe the architect and the designer will have an opportunity to strike out from the eddies into the main stream of life and play a more important and a more worthy part than they have often played in the recent past.

## Discussion

### THE PRESIDENT (MR. E. GUY DAWBER) IN THE CHAIR.

Mr. G. L. PEPLER (Past President, Town Planning Institute): It gives me great pleasure to move this vote of thanks. I attribute the honour principally to the fact of my early and continuous discipleship under Dr. Unwin, ever since his book was published, and of my close connection with the Town Planning Institute, of which he is a Past President, and which represents the co-ordination and co-operation of the architect, engineer and surveyor on which he lays considerable emphasis.

Whenever we gather to sit at the feet of Dr. Unwin, we come expecting to receive inspiration, and this

evening our expectations have been realised abundantly. His genius has brought to our notice a practical proposition, touched and illumined with the magic of insight and imagination. He has delved out for us some underlying verities and shown us their essential place in a balanced scheme of things, and not least in value, it seems to me, is his clear demonstration that the practical and artistic are but two aspects of one purpose.

In view of the subject of the paper it seemed rather appropriate to read this morning, in the *Yorkshire Post*, that yesterday, on "Mayor's Sunday," at Hartlepool,

the preacher was an architect, Mr. W. D. Caröe, and the report of his address was headed "The Shame of the Hideous."

This subject of civic design has many aspects, and if we are to succeed in any of them we must have the support of public opinion. One matter in which we ought to be able readily to enlist public interest is the urgent need to save from further spoliation our beautiful countryside, which is not only of great value to ourselves, but is the delight of our sons and daughters all over the Empire, as well as of visitors from other lands.

The illumination of the artist, using that word as defined by Dr. Unwin and not as the maker of pretty trifles, seems to me to be required at all stages of city building or town or regional planning. In the essential preliminary studies imagination is required in the selection of relevant items for survey, and still more in achieving graphic representation so that any citizen may readily understand the interplay of causes and grasp the essential facts of the situation. Failing this understanding, he cannot be expected to realise the necessity for a policy and for a plan. There is still a great field for architects and artists in the matter of graphic representation, and it is one of extreme importance at the present day.

It gives me the greatest pleasure to propose the vote of thanks to Dr. Unwin for his inspiring address.

THE PRESIDENT: We have with us to-night the Very Rev. the Dean of Canterbury, and perhaps he will be kind enough to second the resolution.

THE VERY REV. G. K. A. BELL, DEAN OF CANTERBURY: I have listened to Dr. Unwin's paper with the greatest interest, and have also watched his making magic on the screen with pictures, showing us how to do what ought to be done, and occasionally how not to do what, sometimes, people want to do. It seemed to me, as Dr. Unwin's paper progressed, that the title of his lecture, "The Architect and his City," opened up the widest possible field, because, as he conceives the function of the architect, it seemed to embrace all activities and all experiences. As I listened to him I reflected that I had lately been to a city in which architecture is, I believe, at the present moment at a very high pitch of development, the city of Stockholm, where there is a beautiful city hall, beautiful modern churches, beautiful streets and houses, and, fortunately—whether as cause or effect, I do not know, but perhaps as cause—where there are no slums. Browning in one of his poems makes an appeal to the public. He says:—

"I would like to see the butcher paint, the baker  
write for his pursuit,  
The candlestick-maker much acquaint his soul with  
song, or haply mute,  
Blow out his brains upon the flute."

Dr. Unwin appeals for the co-operation of the artist and the practical man, and I suppose that the practical man and the ordinary member of the general public, if he is to have something of the artist spirit of appreciation in him, must blow out his brains upon the flute. If you want to develop the artist spirit in the ordinary member of the general public, I am sure you can do it by appealing to him, as Dr. Unwin said, by building his home.

PROFESSOR S. D. ADSHEAD [F.]: I should like to support Dr. Unwin in his plea for giving the artist his place in connection with the work of the practical man in the great movement of town planning and housing. He has touched on many aspects of the question; I think there are two very real and very practical aspects which, it occurred to me, might be emphasised. He made a plea for regularising and giving order and architectural value to our road crossings and road connections. There are greater opportunities for the architect in these particular sections of road construction than is generally appreciated. It is hardly realised yet that it is the buildings that make these places, and not simply the lines of the roads. I regret to see the small enterprising builder monopolising potential sites. I should like to see those areas—of which I know a good many—considered not simply as road connections and road crossings, but as potential positions for building.

I should like also to emphasise the importance of what Mr. Pepler said respecting our rural scenery. We all realise that great freedom has been given to the motorist; he can race all over the country; buses, I think, run almost from Land's End to John o' Groat's, and public conveyances of all kinds run along all roads two or three times a day. It is little wonder, therefore, that the countryside is being bespattered with spots of architecture not always of the highest value. While the public enjoy being able to penetrate every hole and corner of this beautiful land, we ought to see that the control of building operations and reservations is as hard and strict as this country can make it. If we do not reserve our beautiful landscape, the ruination as time goes on will become more and more apparent, just as in the industrial stages before the Public Health Act of 1875 it was not realised what stereotyped streets meant until the process had developed for a considerable number of years. We should have the foresight to see that unless we take this great question in hand at once and seriously, with all the force we can muster, there will be an overwhelming reproach upon the early days of town planning.

DR. I. G. GIBBON (Ministry of Health): Dr. Unwin always deals with his subjects with so much freshness of thought and so much felicity of expression that it is almost disloyal to disagree with him. I am not sure that he should not be classed as a dangerous person. I should have liked if he had started his



lecture with a dictionary. "Artistic temperament," "design," are cloudy words. What, exactly, do they mean? Do we mean anything more by the term "artistic temperament" and by "design" than constructive imagination? I suggest that constructive imagination is not the monopoly of the so-called artistic temperament. Constructive imagination is as necessary to a Ford as to anyone, and much more to the man who made the car—necessary even to that person, the technical man, who, I suppose, is the incarnation of all the seven deadly sins, the even mere administrator, like myself. We all require it if we are to do work just above the normal. The constructive imagination, even the artistic temperament, is very much more widely diffused in the community than has been suggested.

May I apply this to one section with which I am very much concerned, that is, town planning? What do we mean by "the city beautiful"? Do we mean a city with one design? I think that, in terms of the modern large town, we do not. We do not plan a town in order to look pretty on a map; we do not plan a town even that it may be a beautiful blob for the future wayfarers by air when they scuttle past at 200 miles an hour. ("Why not?") Why not? The things which can be seen from the air at present are the things which town planners detest—straight lines—and which they detest with good reason. I do not go contrary to Dr. Unwin, but rather in development of his theme, and a step beyond. In wise town planning the first man with constructive imagination who is required is not the so-called artist, however valuable he may be, but the man who, for want of a better phrase, you may call the social economist. It is no good the architect, engineer or other technical man going on with his plan unless the social foundations are securely laid, and that is the task of the social economist, who may also be an engineer, an architect or other technical man. I should be a little more confident in trusting the architect in these matters if I saw more evidence of that sense of grouping in our buildings which has been so sadly lacking during the last half-century. I shall not throw stones at Regent Street; I can, however, recall the most magnificent opportunity for a public authority in the whole world, which has not been spoiled, but which has not been developed to anything like the degree which might have been reached, because it has not been developed as a whole. It is a group of individual buildings, and not a unified group. The difficulty hitherto in town planning has been that the problem has not been looked at as a whole. Town planning, as Dr. Unwin said, is something more than any one of the arts: it is something quite new, something that requires a training and development of its own and the aid of all the various other professions.

One of the most virile thinkers of last century showed how various potentialities develop at different stages in man, and how it depends on the surroundings which faculty develops to the full. I suggest there is in all persons a desire for the beautiful, or the desire for that which is fine, good and well-proportioned, and not necessarily ornamental. Restraint is a necessity with the poor: it is a virtue in the rich. I suggest that the Institute can render a very great service indeed in cultivating the faculty of restraint.

Colonel C. H. BRESSEY (Ministry of Transport): I should like to congratulate you all on your courage in coming to listen to this peculiarly interesting lecture and to see those slides thrown on the screen, for one never knew, from moment to moment, what they would be; whether they would be warnings or admonitions or praise, and whether the name of the unfortunate architect would be on the edge of the slide. For that reason I felt particularly glad to-night that I was not a member of your profession, though I missed that thrill which you all must have had when you saw those slides unexpectedly thrown on the screen. I also noticed considerable doubt among you as to which you thought you ought to applaud, and which ought to be hissed; which rather extends the idea which Dr. Gibbon had just put before us, the slight doubt as to the efficiency of the artistic temperament. I notice the same doubt also pervades subjects which are largely represented in the Press on the artistic side, such as the fate of Waterloo Bridge: whether to improve it by raising it in its present site, or by raising it elsewhere, or by putting up a new bridge in its place. These differences always prevail as soon as an artistic subject comes forward. I doubt whether Dr. Unwin, in his choice of illustrations, has given to the devil his due. I have noticed that when you have a picture of a street in a slum the rain is always falling, the sky is very downcast, there are no trees and no shrubs and nothing to brighten the view. But as soon as a garden suburb is depicted in a photograph, it appears on the brightest of spring mornings, when the birds are singing and all the flowers are in full bloom. I think the artistic temperament in that matter is apt to weight the scales.

I am sure Dr. Unwin must feel extremely gratified at the attention which has been bestowed on town planning, in its widest sense, and that cannot be better proved than by the fact that in the present year, 1925, both the Ministry of Health and the Ministry of Transport have promoted Bills making it possible for local authorities to prescribe building lines along all their roads. I have no doubt that wide advantage will be taken of those powers, and that Dr. Unwin, Mr. Butler, and all those associated with them, will take the opportunity of laying down lines which will give posterity greater advantages and greater amenities and greater

attractions than have yet been found in the country round our great towns.

Mr. W. R. DAVIDGE [F.]: Dr. Unwin has a great capacity for enthusing people wherever he goes. I think it is a national loss that he has to spend so much of his time in the humdrum dreariness of the so-called Ministry of Health, when he might probably be doing a greater national service by enthusing the nation as a whole. Dr. Unwin is a national possession, and it is a great thing to realise, and the Ministry of Health is coming to realise, that he is a national possession. There is one Department of the Ministry of Health—namely, the Bye-laws Department—which is not, I think, represented here to-night. If not, I hope Dr. Unwin's influence will eventually permeate that Department and will save the country from some of the unsightly buildings which are being put up, and which are tending to spoil the countryside. It is time that some definite steps were taken, either by bye-law or by definite regulation, to prevent beautiful spots of this beautiful country from being desecrated. When the Dean of Canterbury was speaking, earlier in the evening, with Dr. Unwin's influence still upon us, I thought it would be appropriate, as one reads, in other countries, of the sea being blessed, and harvests being blessed, that before any new suburb or any new estate were laid out it should be consecrated by the Church. It is a sad thing that we have to wait until we depart this life before we touch consecrated ground, and it is as much a part of the Church's mission to see that the work in which the country is engaged is consecrated work, that it is high work for which we need high ideals. I feel that Dr. Unwin's mission to all of us is to lift us to a higher plane, so that we can realise that the work we are to do, whether it is part of the plan or the whole of the plan, is, in the highest sense, for the good of the community.

There is a point which Dr. Gibbon touched on—namely, that there are no powers for the co-ordination of the whole work in one. Dr. Unwin is one of the few men who have the power and the privilege in some cases to co-ordinate the work as a whole. At present our town-planning powers are confined largely to the plan: the elevation does not appear. As Professor Adshead pointed out, the elevation is the essential part; it is the part which you can see, and it is essential that there should be control of town planning, and a co-ordinated inspiration in the buildings that are erected on that plan.

Sir RICHARD PAGET [Honorary A.R.I.B.A.]: I should only like to add one word to the discussion which has followed Dr. Unwin's paper, and that is on the point of beauty. He suggested that you could not be a full man without a sense of beauty. But you cannot even be an animal without a sense of beauty, for this attribute goes far back into the animal life, as you know from

such examples as the Bower bird, which spends so much trouble in making its surroundings beautiful, or peacocks, which strut about for the admiration of their lady friends, or the pheasants in Assam, which have competitions in dancing. They show that the love of beauty for its own sake is one of the things which make life worth living, and this is one of the heritages of the higher animals—certainly of man. If you look back you will see that man has lost some of the greatest pleasures of life through this ignorance on the subject of beauty, and the ignorance of the "practical" man as to what is really practical. The practical man has gone in largely for cheapness. But we realise that things which are beautiful are worth paying for. We shall have to have a higher regard for things of prime importance. The lives spent by masses of people for some generations in some of the towns of this country have not been worth living; they have been worse than the lives of slaves in past times, and far worse than the lives of many savages. It would be a magnificent thing if the Church, and if all those who have the opportunity of influencing public opinion, would realise the importance of a sense of beauty for its own sake, and how essential it is that the practical man should in every case regard the human sense of beauty as one of the very first things he has got to cultivate.

Mr. EBENEZER HOWARD: Dr. Unwin touches a note which in itself is a true note, but which was not a sufficient expression of his own idea, I am sure, when he seemed to emphasise the point that the dweller in a particular town should think, as it were, primarily of problems connected with that town. It would seem natural that that should be so, but I contend that in our day and generation we must look at the country as a whole. I happened to be born in the City of London. I ought to be proud of it, I suppose, but I am not. There was a time, I remember, in 1874, when I came back to England from America, and I was mightily proud, as I rode on the omnibus, to see the great surging crowds, which were more intense then than they were in Chicago at that time. I think Dr. Gibbon touched the right point when he said the problem is primarily one to be solved on lines of economics. The problem has been created by what is called the industrial revolution which disregarded true economics in the search for wealth for the individual; and if we are going to solve this problem we must start with economic principles: beauty certainly. This has been mainly disregarded by our great industries. We must work on the lines of true economy from the point of view of the health and efficiency of the workers. Dr. Unwin has done much in the direction of solving those problems. But the manufacturer realises the importance of cheap transport for his goods, the raw material that he has to receive, the goods that he has to sell, because he sees them expressed in pounds, shillings and pence, which is the language



that he understands better than anything else. He considers very little the cost of transport of his workers travelling to and from their work, in energy, in time, in money. I really believe that the manufacturers of this country will have to be taught by their workers' insisting that this element of transport will be considered equally with the other. Then you will get that problem in the course of its solution, which I see *The Times* to-day, in its leading article, referred to as one of the most important of all the problems, the redistribution of our population.

Mr. EDWARD P. WARREN [*F.*]: It gives me great pleasure to have the opportunity of expressing the delight with which I have listened to Dr. Unwin. I well remember the admirable paper last year, which he read at Oxford.

People are too prone, in considering town planning, to regard it as an exact science. I do not think it is that at all; it is not something which you can learn, like algebra, from a book. It is largely an affair of perspective and sympathy; architectural sympathy I take for granted, sympathy for the needs of other people and their possibilities, whether we are building, walking, inhabiting or breathing; and the task which the architect has to fulfil in his contributions to town planning is largely conditioned by sympathy, ordinary gentlemanly feeling. We should try to keep the ideal before our country not of enlarging the towns or increasing the population, but of enlarging its towns and decreasing its population and so giving more room and more possibility of life to people who have to inhabit the centre of a town. If we are to seek a motto for town planning, or rather a more or less cheerful sentiment in that direction, it might be not "Happy is the country that has no history," but "Happy is the town that has no slums." If Stockholm has no slums, Stockholm is in a condition far beyond that of most other European cities to be happy. In Copenhagen, which I have visited, the apparent absence of slums struck me. There may be slums, but I did not discover them—that was some time in 1909; but I noticed then that every effort was being made to make the town pleasanter to all classes of the people. There was provision for the then growing motor traffic, for the horse traffic and for the bicycle traffic; there was also a kind of old-age pension, delightful flats which were bestowed upon people who had reached 65 years of age, after reputable careers, who had money enough to furnish their rooms. They were supplied with a flat, with heat, light and water and garden. They had to find everything else for themselves, but those homes were found and secured to them as long as they were capable of inhabiting them respectably. That showed not only a sense of town planning, but also a sense of preparation for the possibilities of civilised life. To plan towns without doing something to secure civilised life in them is only half the battle.

There is one aspect of affairs affecting roadways in this country which requires immediate attention. I have the good fortune to inhabit a county which is very beautiful, Berkshire, and I have been horrified lately to notice an increase of abominable corners decorated—or rather, I should prefer to say, desecrated—by things which at a distance look like a collection of vividly painted idols in red and green. On coming closer you find that they are stations of the A.A. (the Automobile Association), to which I belong, and there are advertisements of Shell Spirit. They are a vivid red, shaped like joss houses, so that an intelligent savage visiting this country for the first time would think they were joss houses, and that the figures were idols. And I notice the same sort of thing has gone farther, into Dorsetshire and Herefordshire. It is terrible that these things should go on spreading. I possess a motor myself, but I do not want to go at sixty miles an hour through a village, and I do not see why we should devote so much county money, ratepayers' money, to make it more and more easy for people to go at an inordinate speed; or why, if ancient buildings happen to be on corners, they should be removed and corners rounded so that motorists can go more recklessly at a still greater speed. Town planning is in danger of becoming largely conditioned by the motor car, and we who are keen about town planning should try to be fair in our minds towards other means of locomotion, and to no locomotion at all.

Mr. GILBERT H. JENKINS [*F.*]: Town planning is a very young science, or art, and the fact that it is called town planning has, to a certain extent, limited its field. One wonders whether the time will come when town planning will be considered not only for a small town which is growing, or a particular district of a town which is increasing, but for the time when some of the houses will have become business premises, and some of the streets which are now byroads will be important thoroughfares. One notices in the towns of England that there is a certain standard which depends partly on the age of the town, partly on its growing importance. You might express it in storeys; the two-storey village, the three-storey country town, the more important four-storey towns. London at the end of last century you might call a five-storey town; now it is rapidly becoming a six-storey city, and perhaps in the near future it will be an eight- or ten-storey city. When we look at a town from the point of view of its development, it appears that, not only from the artistic, but also from the traffic and utilitarian points of view, one has to consider in the layout the width of the street and its relation to the height of its buildings. If we are going to preserve our countryside, should we not consider that when our cities have reached a certain size people should be compelled to live in flats rather than houses, and so prevent the countryside being swallowed up entirely?

Major H. C. CORLETTE [*F.*]: We have heard something about the artistic temperament, and the artistic point of view, and about beauty, but I do not think any one of us here can define what any of these is. Beauty, as far as I see it, is something which grows very much of itself. One speaker suggested we should look at the whole rather than at parts. I suggest we should consider both together, because the whole cannot be complete unless the parts are satisfactory, and no part can take its place in the whole unless there is a satisfactory relation between the two. But let me make one practical suggestion in connection with the point he made about the redistribution of the population. Is it not true that if you were able to treat the Empire as a whole, and not only look at this country as a whole, you might attack the problem of redistribution in another and a fresher way? We have in this country, as a consequence of the extraordinary industrial revolution of the eighteenth century, a condition of slums which ought never to be seen in any country in the world. If you can only persuade a sufficient number of people that there are open areas waiting to be peopled in the outside parts of the Empire, you can pull down half the slums and make garden cities in the middle of London. Let the people realise there are places waiting for them in Canada, Australia, New Zealand, and South Africa, where they can live happier and healthier lives.

Mr. L. H. KNOX: I would like to speak for a moment on a question which has not been emphasised, and that is the æsthetic aspect. Architects have the idea that they make architecture, but it seems to me that is not so, that there is something behind all the standard styles which architects never made. There was a soul in Tudor times which made architecture then, just as there is a soul in every age which produces architecture, sculpture, painting, true poetry or true music. Without that soul, we cannot have any true fine art. The practical aspects of town planning are good, and architecture is in a better condition than any of the other chief fine arts to produce satisfactory results, because the practical and the æsthetic are more nearly combined in it. But we can do nothing original. It appears to me that the fault of architects to-day is that they conceive they can do something original. It takes the soul of the age truly focalised to do anything worthy. We can adapt the old styles to domestic architecture, and I think public architecture, especially in this city of London, is most lamentably inefficient or deficient. There is a lack of taste in the new buildings, and architects seem to be doing much to spoil their town for future generations.

The PRESIDENT: We have had an extraordinarily interesting discussion, as well as a very charming and admirably thought out paper from Dr. Unwin. He has covered so much ground, and the speakers have

dealt with so many subjects, that I feel it is impossible to add anything at this meeting to what we have heard.

A good deal has been said about the education of the public; I venture to think that we also need to educate the architect. A great deal of the unfortunate results of the town planning we have seen in the suburbs of our towns all over the country, from east to west, is due to inefficiency and inadequacy on the part of the officials in whose hands—whether they be professional architects or salaried officials—these problems have been placed. The layout of the ground is often very commendable, but when you get to the buildings themselves they can only be described as a disgrace to modern architecture. If architects give the public good architecture, the public will be quick enough to appreciate it.

I put the vote of thanks, which was proposed by Mr. Pepler and seconded by the Dean of Canterbury.

The vote was carried by acclamation.

Dr. UNWIN (in reply): I do not think there is much that I disagree with in what my friend Dr. Gibbon said. I think probably he is right, that artistic temperament and design are very difficult words to define, and probably I was also right in not trying to do so, at any rate with the extent of my knowledge. I also very largely agree with him that a man like Ford has something of the artistic temperament in him. I think the artistic temperament may find different expressions, and, as I rather hoped to bring out, I think we can make better use of him in many ways than we are doing just now. I agree that the whole of our town planning and city planning must be based on the social economist. It is a matter of our finding some form of beautiful expression for that life and for those conditions which we shall learn from the economist.

I will not go over the various points which have been raised, but there are two I should like to mention. I do not think that our trouble in this country at the present time is that we have not room for the people. I do not think it is the land we use that matters: it is the land we litter and waste. The whole of our population could be put on the land with a density of not more than ten houses to the acre, and there would still be plenty of unspoiled country left.

I was interested in what was said about beauty. I shall not go into it further to-night, except to remind you that William Morris always said beauty was largely the expression of men's joy in their work, and I think there is a very profound truth in that. I think it has got to grow. It has that inestimable value that you increase it by enjoying it, and you still further increase it by sharing it, which is not common to many of the other joys of life that some of us run after with so much zeal. Therefore the longer I live the more I am convinced that it is one of the things we ought to prize highly, we ought to cherish, and we ought to seek to create.



# Reviews

EAST KENT REGIONAL PLANNING SCHEME  
PRELIMINARY SURVEY. *Prepared for the Joint  
Town Planning Committee of Local Authorities by  
Patrick Abercrombie in collaboration with John Archibald.* [The University Press of Liverpool and Hodder  
and Stoughton, Ltd., London. 1925.]

Despite Professor Abercrombie's wide experience in the preparation of regional reports he must have felt that the adequate presentation of the problems of East Kent would tax his abilities to their utmost. That he has come through the ordeal not merely with success but with distinction is a matter for general congratulation, proving as it does not merely the practicability of this form of study under more than ordinarily complex conditions, but also the importance of affording a clear and comprehensive picture of the various aspects that must be visualised if development is to be on sound lines, and not an incoherent and opportunist patchwork.

Realising the magnitude of his task the author has secured the collaboration of a number of distinguished men whose special experience or local knowledge has added much to the value of the report. The list is too long to quote, but the name of Mr. John Archibald appears as jointly responsible for this work, so it may be assumed that he has had an important share in its preparation.

The opening section deals with the topography and geology of the district, which may be roughly defined as that part of Kent lying east of a line drawn from Whitstable to Sandgate. The importance of these aspects need hardly be emphasised in view of the fact that the anticipated development of the coal field is the main reason for the preparation of the report. Plans and a good sectional diagram give a very clear impression of the geological formation with its coal field shaped like the end of a spoon, its edges striking the coast line at Richborough and Shakespeare's Cliff and its point lying a few miles to the north-east of Canterbury. After this outline the report reviews (II) the agriculture and vegetation of the district, (III) its archæological features, (IV) administrative divisions, (V) population, health, and housing, returning in section VI to the industrial survey, which is mainly devoted to the coal field, though the ironstone beds towards Folkestone, and other economic minerals, come into the account.

The coal is found in a number of seams of high grade steam coal, in the case of many borings exceeding a total thickness of 40 feet in seams of over 2 feet. The coal is deep down, workable seams ranging from 1,250 to 2,800 feet in depth, according to the locality, as the chalk formation averages some 1,000 feet, and underlying this there are older beds varying greatly in thickness. The depth dictates one condition that may be regarded as advantageous, namely, that the pit heads will probably be some four miles apart and the country less wrecked in consequence. If the proposition that the coal should be employed to produce electric power at the pit heads were carried out, there will be a further gain towards the preservation of the amenities of the district. That this is of the gravest importance, even from the economic standpoint

alone, will be realised when we find that the sea coast towns which would be more or less affected by any untoward development have a rateable value of £1,313,162, which capitalised at 20 years' purchase gives a total of £26,263,240, while the assumed value of eighteen pits in full working does not exceed a capitalised rateable value of £2,816,400.

As the report says, "The coastal towns that encircle East Kent are at present its most considerable commercial asset. From Whitstable to Folkestone and Sandgate they form a series of seaside resorts of varied character which it would be difficult to surpass anywhere in these islands. It is therefore exceedingly important that nothing be allowed to destroy their value in the eyes of the Londoner, for whom, of course, they primarily exist. It would indeed be poor policy, from the point of view of the ratepayers of East Kent, if the increase in rateable value of coal area in the rural districts were counterbalanced by a decrease in the sea coast towns.

"But without some say in the regional ordering of these about-to-be industrialised rural districts, these towns would be at the mercy of influences beyond their control; if the industrial growth were of the old-fashioned, smoke-producing, country-destroying sort they would find one of their real attractions—the rural charabanc trips—gone; and even if the worst deformities of industrialism were avoided, they would not be secure without a regional plan, which promoted their interests as well as those of the coal field.

"There is really no antagonism; forethought and care in zoning, road planning and the preservation of certain natural features are all that are required. These special features of the Regional Scheme should not interfere in any way with the development of the coalfield which, in fact, will in every way be advantaged by systematic planning."

In view of the importance of this comparison it has been brought forward from its position in the report, where it is preceded by studies of (VII) communications, (VIII) open spaces, and (IX) Canterbury, Sandwich and the old villages. This last section, as may be imagined, lends itself to illustration, and some attractive views are included both in this and in the following section on seaside resorts.

The second part of the report deals in outline with the probabilities for the future, including the general zoning of the area, seaport developments and the distribution of population, the estimate being for a probable doubling of this. Here the proposal takes the form of some 7 or 8 subsidiary towns appropriately placed with respect to the coal industries and looking towards Canterbury as a cultural centre and towards the coast resorts for recreation. For these towns the density laid down is 12 houses to the acre: as they would be purely residential, this is considered to be adequate.

Other matters which come under review include improvements in road and rail communications, selection of open spaces, the methods of coal working with a view to eliminating smoke, water supply and drainage, electric power, small holdings, social and educational consideration, with a special claim for the establishment of a University at Canterbury, and methods of realisation and administration.

H. V. LANCHESTER [F.].

## HET MODERNE LANDHUIS IN NEDERLAND.

By K. Sluyterman and A. J. Van der Steur. 1922.  
[The Hague: M. Nijhoff.]

This book comprises plans and photographs of over 200 modern houses in Holland. The illustrations are well arranged and reproduced; the plans are clearly drawn and in the majority of cases show both floors. As a phase of modern architecture, however, the buildings themselves are almost uniformly disappointing. It sets one taking oneself to task to discover whether the disappointment is due to a lack of appreciation in the critic, or a lack of any interesting quality in the architecture. There can be no question of prejudice, for ancient Dutch architecture appeals in an extraordinary degree to the English student, but there is little to remind us of old world beauty in the book before us. The styles and forms are only too familiar, and recall countless designs in our own building papers of some years back, before the modern architect had cast off the "villa" obsession and had studied domestic architecture in earnest. There is everywhere an unrestful variation in scale and in features, an irrational disturbance of the elementary conditions of effective composition. In very few cases does the building speak with its own authentic voice; the paraphernalia of gables, external woodwork, windows of varying proportions and design, throw each scheme into confusion. Any satisfactory relation between voids and masses, or even between the roof line and the walls, is hard to find. The same lack of directness and coherence is noticeable in the plans. Among the few exceptions are some pleasing cottages (C. Brandes), a house with wings and cupola (Freem en Bremer), cottages showing an effective use of the mansard roof (De Groot and Van Laren) and a large house with a fine breadth and dignity in its classical treatment (J. Limberg). The book is witness to a vigorous and lively movement in building, the faults of which may be due to an unchecked exuberance of spirit which will correct itself in time. WALTER H. GODFREY.

## Correspondence

## LIGHTING OF PICTURE GALLERIES.

27 Buckingham Gate, S.W.1,  
10 November 1925.

The Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—In your issue of 7 November Mr. Hurst Seager takes emphatic exception to two propositions which I ventured to put forward in your issue of 25 April last.

- (1) That the glass of pictures must always reflect something.
- (2) That the difficulties of lighting picture galleries satisfactorily without reflections is not amenable to any one specific remedy.

With regard to the first he proves that if the surface or object which glass can (and does) reflect is sufficiently less bright than that which is seen through the glass, reflection becomes by comparison negligible. When, however, the

conditions of relative brightness are reversed, then it is the reflection which is relatively noticeable.

This is precisely what I endeavoured to suggest, but apparently it was not made clear.

With regard to the second proposition is not Mr. Hurst Seager unduly resenting, as destructive criticism, that which was intended to be constructive or at least helpful?

It is precisely because one admires and appreciates Mr. Hurst Seager's simple and scientific cure for low angle or "spectator" reflections that one deprecates any attempt to ascribe to it other properties, such as the cure of high-angle reflections, if, in fact, it does not and cannot possess them. To do so only tends to prejudice its reputation and to retard its adoption.

Surely Mr. Hurst Seager's own illustration affords an excellent example of the truth of this. In the Gallery of the Art Institute of Chicago (Fig. 2) the pictures are obviously hung low, which is at least one cure for high-angle reflections, and the wall above is vacant.

Had they been hung higher up on the walls and therefore within the plane of specular reflections from the virtual "top side lights," then the very intensity of the latter which protects them from insistent low-angle reflections would surely have rendered them almost invisible behind intense reflections of bright sky and sash bars.

To adopt one specific remedy for all ills is always more or less risky. The stimulating properties, which might render brandy invaluable in the case of a patient sinking from loss of blood, might be fatal to one in high fever.

PERCY J. WALDRAM, *Licentiate*.

## THE AUCTIONEERS' AND ESTATE AGENTS' INSTITUTE OF THE UNITED KINGDOM.

29 Lincoln's Inn Fields,  
London, W.C.2,  
7 November 1925.

The Editor, JOURNAL R.I.B.A.,—

SIR,—Following the award of the Institute Medal to the architects of our new premises, I am directed to inform you that facilities will with pleasure be granted to any of your members to inspect these premises should they desire to do so.

E. W. BLAKE, *Secretary*.

## OLD BELLS IN ANCIENT CHURCHES.

The Society for the Protection of Ancient Buildings,  
20 Buckingham Street, W.C.2.

The Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—I am desired by the Committee of this Society to draw the attention of architects to a new danger that may affect fine rings of bells and remaining interesting oak cages which sometimes still carry them.

My Committee has recently heard of a case where there is an excellent peal of ten bells. It is reported that these are to be put into the melting pot in order that a carillon may be made. My Committee hope that the architects of the Royal Institute will use their influence to prevent this form of destruction.

With regard to the ancient oak cages which still remain in mediæval towers, recently collected evidence is leading authorities on this subject to the opinion that very many of these excellent works of carpentry date from before the Reformation. A. R. POWYS, *Secretary*.



# Waterloo Bridge

SIR EDWIN LUTYENS'S REPORT TO THE LONDON COUNTY COUNCIL.

*I.—Letter dated 29 July 1925, from the Clerk of the Council to Sir Edwin Lutyens, R.A., F.S.A., F.R.I.B.A.*

SIR,—You are probably aware that the failure of some of the piers of Waterloo Bridge has led to the expression by various engineers of divergent views on the question whether or not the existing structure can be maintained by some process of underpinning. This difference of opinion may necessitate some further inquiry into the technical question in dispute, but in the meantime the Council desires to be advised on a point which may become of great importance should it eventually be established that the old bridge can be maintained.

The present structure accommodates no more than three lines of vehicles, and valuable relief should be afforded to cross-river traffic in that neighbourhood if the bridge could be made to take four lines. This could be done if a sufficient width between the parapets—say not less than 36 feet—could be appropriated to the carriageway, suitable provision being made elsewhere for the foot passengers thereby displaced.

It appears probable that there would be no serious constructional difficulty in making this provision by corbelling out part of the footways beyond the existing line of parapets as was done, for instance, at London Bridge, another of Rennie's notable works. But it is important that the Council should be advised as to the artistic effect of such an alteration. Little would be gained if the necessary width were secured by means which would deprive the bridge of so much of its artistic value that it might just as well have been replaced by an entirely new structure designed to meet fully present and future traffic needs.

I am, therefore, directed to ask if you would be willing to prepare for the Council a design showing how such a widening could best be carried out together with a report on the artistic effect of the alteration. If in your opinion there are other and more desirable ways of obtaining similar advantages, the Council would be obliged if you would advise thereon also.

Any information which you may require as to the present structure of the bridge or other material facts will, of course, be furnished by the Council's officers.—I am, Sir, your obedient servant,

(Sgd.) MONTAGU H. COX,  
Clerk of the Council.

*II.—Report dated 8 October 1925, by Sir Edwin Lutyens. To the Clerk of the County Council.*

SIR,—The problem put before me has been to prepare for the Council to design for corbelling out the footways and thus effecting a widening of Waterloo Bridge.

I have been further asked to draft a report on the artistic effect of such alterations, and to say whether, in my opinion, there are other or more desirable means of obtaining this end.

I have explored every avenue of approach to this

problem with due regard to the date and drawings so generously supplied to me by Mr. Humphreys; yet I have, I fear, been unable to arrive at any satisfactory design whereby the bridge could be widened by thus corbelling out the parapets, or any similar method of addition.

Architectural detail might amend the schemes already put forward by the Council's Engineering Office, and by others that I have seen; or again, those published at various times in the Press, for corbelling in this matter; but any such amendment would not affect the principle I am anxious to maintain, and I have come to the considered conclusion that there is no way of widening Waterloo Bridge by any such method, without detrimental effect to its appearance.

To overhang footways would altogether destroy the architectural character of Rennie's bridge, which relies entirely upon its spontaneous and direct motif of arch and pillared buttresses. The narrowness of the bridge emphasises its robust character, and, to link the buttresses with any horizontal line that would throw into shade the crown of the arches, would completely mutilate the character of the original design, and would create in fact not only a new bridge, but an ugly one.

I have avoided conferences of any sort so that I remain unprejudiced by divergent views on questions of repair or reconstruction.

Good engineering, as good design, always follows the most direct method; and I cannot but believe that, no matter what the Council's decision may be, the bridge, to be maintained, must eventually be rebuilt.

The scheme prepared to show how the bridge could be tunnelled with sub-footways is ingenious; yet I believe that Mr. Humphreys agrees with me in that such a solution is one not altogether possible to recommend. The best way, if new footways are decided upon, would be to build them in suspension, as independent structures. They would, of necessity, mask the existing bridge; but whensoever, if ever, a Charing Cross or an Aldwych Bridge is built, and when built prove their prophesied relief to present traffic congestion, these independent footways could be removed, and the present bridge, having in the interval been kept intact awaiting this happier time, could then reveal her beauty once more.

Admitting the possibility of a new and independent structure supplementing the existing bridge, it would be possible to build a new bridge of one span—over and above the existing bridge—either for foot passengers or for vehicular traffic. It would entail some thirty or thirty-five steps up from the level of Wellington Street to the upper bridge—an additional burden truly on those pedestrians who wish to cross the river from the Embankment, but one which might be appreciated as a small tax on the public, who have demonstrated their anxiety to save the bridge they so rightly admire. However, I think that only a small percentage of people wish to cross the bridge from the Embankment, as compared with those who cross it from the Strand level.

If a vehicular overhead bridge were contemplated, it would entail a road, starting from York and Stamford Streets, with a gradient of one in forty-three, to give head room over the old bridge, which, on the Middlesex side, could be carried across the Strand to arrive at Aldwych in very much the same position as is proposed in Mr. Humphreys' under-road scheme.

A bridge suspended above the old bridge would not destroy the effect of the yet existing bridge—though it might interfere with various buildings or Somerset House—facing Wellington Street, and much could be said against such interference; but wherever one turns, or whatever solution is attempted, questions of this nature are bound to arise. London suffers, and will for ever suffer, from problems of this kind, until such time as some definite plan and policy is adopted which will ensure, over a period of many years, the growth of a new and predestined London.

A suspended bridge in one span (an exciting problem for your engineers) would create the least disturbance to the lines of the still barely existing bridge; or, similarly, a series of spans, built in suspension to contradict the lines of the present arches. The bridge of one span would be the least disturbing to the views, across the bridge, of St. Paul's, or to the lines and design of Waterloo Bridge itself.

Again, by heightening the bridge, I believe it is possible to widen it by 12 feet 6 inches, thus giving a 40 feet carriageway and two 7 feet 6 inch footways; and this in the end may prove to be the simplest solution, if, when rebuilding, the piers are raised a minimum of 5 feet and a maximum of 8 feet 3 inches. Rennie may have not foreseen the Embankment, and, for this or other reasons, that the bases of his columns would be awash at high tide.

By raising the piers, these bases could never be flooded, and the raising of the arches would increase the waterway between the piers and their abutments by a practical width of 3 feet 6 inches, and, incidentally, greatly improve the Victoria Embankment thoroughfare.

This would again improve the appearance of the bridge at high water. The parapets would remain level, and the traffic gradients required to reach the new level would be within the parapets above the first span on either bank. Widening the bridge will increase the relation between the pier lengths and their pillared buttresses, which are now, in my opinion, great in their æsthetic quality, a point which, I believe and deplore, few realise or appreciate; and for this reason it may not be considered a matter as great in importance as any scheme merely affecting the elevation.

I deeply regret that I have failed to find a sure way of widening Waterloo Bridge by any method which does not, in some way, mar its brave appearance.

Yet I have only mentioned a few of the many ways in which I have endeavoured to discover an adequate solution of what I believe to be a nearly impossible problem—so to add to the amenities of Waterloo Bridge, without affecting its æsthetic possession.

Yours faithfully,  
(Sgd.) EDWIN L. LUTYENS.

#### SIR REGINALD BLOMFIELD ON THE REPORT.

The following letter from Sir Reginald Blomfield on the report was published in *The Times* on 10 November:

"The County Council have done well to publish Sir Edwin Lutyens's report. At least we now know where we are.

The report deals with various schemes for the alteration of the bridge—(1) Widening by corbelling; (2) footways tunnelled under the roadway; (3) footways alongside of the bridge formed as independent structures; (4) a vast new bridge in a single span built high and dry above the existing bridge, either for foot passengers only, which would involve 35 steps up from the original bridge, or for vehicular traffic, in which case it is to begin at York Street on the south side and end somewhere in Aldwych; (5) an increase in the height of the piers from 5 feet to 8 feet 3 inches, in order to enable the bridge to be widened. Sir Edwin dismisses 1, 2, and 3, suggests either a new bridge, independent of and above the existing bridge, or the raising and widening of the bridge as the nearest solutions he can suggest of the problem of "adding to the amenities of Waterloo Bridge without affecting its æsthetic possession," whatever that may mean.

The prospects opened up by this report are indeed alarming. Imagine this gigantic arch in a single span above the existing bridge. As seen from either above or below the bridge, the effect would be that of some hideous nightmare, but, apart from the portentous effect of such a bridge, it seems to be obviously impracticable. Sir Edwin says, "A vehicular overhead bridge would entail a road starting from York and Stamford Streets, with a gradient of 1 in 43 to give head room over the old bridge." But the existing gradient of the approach from York Road to the south end of the bridge is about 1 in 36. Therefore the approach to the overhead bridge would not rise above the existing approach, but would burrow into it. What would happen on the north side goodness only knows, and apparently the poor old bridge would lie derelict and partly buried under this fantastic super-structure.

As to the proposal to heighten the bridge in order to widen it, Sir Edwin suggests that this would improve its effect, although he himself had already pointed out that "the narrowness of the bridge emphasises its robust character," and that to widen it would spoil it, and he further suggests that Rennie might not have foreseen that the bases of his columns would be under water at high tide. Sir Edwin may rest assured that Rennie knew very well what he was about, and that he realised the fact, which Sir Edwin seems to have forgotten, that the Thames is a tidal river. As the water is always moving up or down, the water level, though it may appear constant for a very short time, is never actually the same, and arches which might look well at the top of the tide—personally I think they would be spoilt by heightening—might look intolerably gawky when the tide was down. Nor does Sir Edwin appear to have considered the effect this proposal would have on Somerset House. As it is, the junction of the bridge with Somerset House is admirably managed, and is one of the finest pieces of design in London. A conflict of scale between Somerset House and the bridge is skilfully, if narrowly, avoided, and



there is no clash of design where the bridge joins the building; but if the bridge was to be raised some 8 feet and widened it would overpower Somerset House; moreover, it would involve an objectionable increase of gradient in the north and south approaches. The junction of the bridge with Somerset House is an essential point in the case for the preservation of the bridge which seems to have been completely overlooked.

Sir Edwin says, "I have avoided conferences of any sort, so that I remain unprejudiced by divergent views on questions of repair or reconstruction," and, in defiance or ignorance of the views of his colleagues, gives it as his opinion that, "no matter what the Council's decision may be, the bridge, to be maintained, must eventually be rebuilt." Why "must"? The question of rebuilding versus underpinning is one for engineers rather than for architects. But it is well known that the almost unanimous view of architects, supported by very eminent engineers, is that the bridge can be underpinned, that repair, not reconstruction, is all that is necessary, and that on no account should the design of the bridge be altered in any way. The Royal Institute of British Architects is against any alteration; the president of the American Institute of Architects and M. Defrasse, the distinguished president of the Franco-Britannic Union of Architects, have both expressed an earnest hope for its preservation. The Royal Fine Arts Commission, of which Sir Edwin is himself a member, has petitioned the L.C.C.; so has the Architecture Club. The feeling that Waterloo Bridge should be preserved, as it is, is deeper and far more widely spread than seems to be realised by those who talk airily of its possible destruction. Waterloo Bridge is something more than a mere means of transit from one side of the river to the other. It is a noble national monument and it carries with it memories and associations of a period of tremendous stress, far too profound to be tampered with by anybody.

What all artists and many others are out for is to save the bridge as it is, the whole bridge, and nothing but the bridge. It is sincerely to be hoped that the L.C.C. will reconsider the position, and I suggest again that the solution of the problem is to be found, not in the destruction or mutilation of Waterloo Bridge, but in a new bridge at Charing Cross."

#### THE ARCHITECTURE CLUB DINNER.

The Architecture Club held its ninth dinner on 5 November, at the Savoy Hotel. Mr. J. C. Squire (President) was in the chair, and there were present a goodly company of members and their guests. Mr. Squire, in his address, referred to the need of more imposing premises for the R.I.B.A., Waterloo Bridge, and the recent Architectural Exhibition organised by the Club. Mr. Gordon Selfridge proposed the toast of "Architecture," and said it was a great pity that the streets they had recently seen built in London had not been taken in hand by the R.I.B.A., and a plan conceived which would have made Regent Street one of the most beautiful streets in the world.

Mr. Guy Dawber (President R.I.B.A.), seconded the toast, and referred to the architectural abuses in rural districts.

#### THE SELECTION OF STONE FOR BUILDING. LECTURE DELIVERED BY PROFESSOR A. P. LAURIE TO THE STUDENTS OF THE ROYAL ACADEMY ON THE 18TH NOVEMBER 1925.

Professor Laurie began by describing the various stones that were used for building purposes, and gave some account of their chemical composition. He then went on to deal with the two main groups of stones which are used for building—sandstones and limestones, and he described the various causes of the weathering of the stone. He pointed out that the most serious cause of weathering to-day is the attack on the stone of the acid oxidised products of sulphur, due to the burning of the sulphur in coal; and he went on to show that this was not confined to the towns, but is found in buildings even in remote districts.

The action of the sulphur acids results in the formation, in the case of limestones and in the case of sandstones which contain calcite, of calcium sulphate which is slightly soluble in water, and will cause the stone slowly to waste away. But the most serious effect of calcium sulphate is its crystallisation within the stone, resulting in the stone being mechanically broken up. In illustration of this he showed experiments on the breaking up of stone by the crystallisation of salts within it and explained the conditions under which these took place, and illustrated this by experiments made on crystallisation in capillary tubes.

He then pointed out that, as far as sandstones are concerned, it was possible to select sandstones for building which were practically free from calcite, and should therefore be used in modern cities.

In the case of limestones, all that could be done was to select a limestone which would best resist this form of attack. Much depended upon the susceptibility of the limestone to attack, which could be tested by exposing small cubes to an acid vapour and by measuring the rate of absorption of water and evaporation from the stone, which could also be made the subject of laboratory tests.

He described experiments on certain selected limestones, showing how much they differed in susceptibility to attack and in tendency to break up, owing to the crystallisation of the sulphate of lime. Apparently one of the conditions was that there should be free and rapid evaporation from the stone after wetting, so as to draw the sulphate of lime to the surface and prevent its crystallising inside the stone. This raised the question whether the hosing of buildings during hot weather would not be of advantage. Further research was required in these directions, but in the meantime it was quite possible to guide the architect, both in the selection of sandstones and in the selection of limestones, by chemical analysis and by experiments on the rate of attack of acid vapours upon samples of the stones.

## Reconstitution of the Board of Architectural Education

In the year 1920 the Council of the R.I.B.A. decided on the reconstruction of the Board of Architectural Education as soon as the necessary powers had been granted by the Privy Council.

A new Charter having come into operation this year, the matter was at once taken into consideration and the new constitution of the Board has now been approved by the Council.

It has been decided to make the Board fully representative and bring it into touch with other bodies having interests allied to or bound up with those of architectural education, to enlarge its scope and to enable it to discharge its proper functions as the central authority, under the Council of the R.I.B.A., advising on architectural education throughout the kingdom and in the Dominions.

With this object in view the Board is to be reconstituted and is to have under it three Committees with executive powers in all routine matters, viz., Schools, Examinations, and Prizes and Scholarships Committees, the Board itself, subject to confirmation by the Council, dealing with matters of general principle and policy. The Committees being formed of representatives with great experience in the matters with which they will have to deal, and having power to act, greater efficiency and expedition is to be expected. Besides the Committees there will be a small Board of Moderators who will deal with the standard of the examinations and testimonies of study and the setting and marking of the actual examination papers. A small Visiting Board will perform similar functions in connection with the schools and by periodical visits will be able to keep the Schools Committee in touch with all the schools recognised by the R.I.B.A. and ensure that a uniform standard is maintained. The inclusion of R.I.B.A. members, not specially concerned with education both on the Board and on the Committees, will make for breadth of view in the Board and for a wider knowledge of the Board's work in the Institute at large. By all of these means co-ordination is to be expected and the advice and assistance of the State and other educational authorities will be of great value and will enable the Board to discharge its duties with greater weight and efficiency as will be seen from the proposed constitution which follows, the lists being subject, of course, to acceptance from the bodies concerned. The chairman of the Board is Mr. Maurice E. Webb [F.], D.S.O., M.C., Mr. Walter Cave [F.], and Mr. Henry M. Fletcher, M.A. [F.], are vice-chairmen, and Mr. L. Sylvester Sullivan [F.] is hon. secretary.

### 1. CONSTITUTION OF THE BOARD OF ARCHITECTURAL EDUCATION.

One representative from each School of Architecture recognised for exemption from the Final Examination (at present seven, omitting McGill University and Sydney University).

Six representatives of the Governing Bodies of the Universities, including Oxford, Cambridge and London, and three others to be nominated by the Standing Committee of Vice-Chancellors and Principals of the Universities of Great Britain and Ireland.

The Director of Education, School of Architecture, The Architectural Association.

Schools of Architecture recognised for exemption only from the Intermediate Examination—one representative for every two schools by invitation (at present eight, including the Northern Polytechnic and the R.W.A. School of Architecture, Bristol, but excluding the Bombay School of Art and the University of Toronto).

Polytechnics teaching architecture.

Technical Schools teaching architecture. } to be nominated by the Society of Art masters.

Art Schools teaching architecture.

H.M. Board of Education.

The Director of Education, the London County Council.

The Headmasters' Conference.

The Association of Architects, Surveyors and Technical Assistants.

The Institute of Builders.

The Master of the Art Workers' Guild.

The Royal Society of Arts.

The Incorporation of Architects in Scotland.

The Royal Institute of the Architects of Ireland.

The British School of Rome, Faculty of Architecture.

The Royal Academy School of Architecture.

The President of the Town Planning Institute.

The President R.I.B.A.

The Hon. Secretary R.I.B.A.

The Chairman of the Allied Societies' Conference.

The President of the Architectural Association.

Thirteen R.I.B.A. members, excluding the officers of the Board, to be appointed by the Council on the recommendation of the Board of Architectural Education (one-third, excluding the officers of the Board, to retire every year).

### 2. SCHOOLS COMMITTEE.

One representative from each School of Architecture recognised for exemption from the Final Examination (at present seven, omitting McGill University and Sydney University).

One representative from each School of Architecture recognised for exemption only from the Intermediate Examination (at present eight, including the Northern Polytechnic and the R.W.A. School of Architecture, Bristol, but excluding the Bombay School of Art and the University of Toronto).

R.I.B.A. Members.

H.M. Board of Education Inspector.

The Director of Education, the London County Council.

Polytechnics, Technical School and Art Schools teaching architecture.

R.I.B.A. Visiting Board.

### 3. PRIZES AND SCHOLARSHIPS COMMITTEE.

A vice-chairman of the Board (chairman).

R.I.B.A. members.

Schools of Architecture.

R.I.B.A. and other prize winners.

The Director of Education, the London County Council.

H.M. Board of Education.

British School at Rome, Faculty of Architecture.

### 4. EXAMINATIONS COMMITTEE.

A vice-chairman of the Board (chairman).

The Board of Moderators.

R.I.B.A. Examiners (Intermediate Examination and Final Examination).

The Registration Committee.

R.I.B.A. Statutory Examiners.

R.I.B.A. Town Planning Examiners.

R.I.B.A. External Examiners.

R.I.B.A. members.

The Association of Architects, Surveyors and Technical Assistants.



- 5. BOARD OF MODERATORS.  
R.I.B.A. members (ex-Examiners).
- 6. R.I.B.A. VISITING BOARD.  
The chairman of the Board, chairman of the Visiting Board.  
A vice-chairman of the Board.  
The hon. secretary of the Board.  
A teaching member.
- 7. PROBLEMS IN DESIGN AND TESTIMONIES OF STUDY.  
A panel of twelve examiners will be set up to deal with problems in design and testimonies of study.

TOWN PLANNING SCHEMES.

In order that members may be kept informed as to the position of Town Planning Schemes in course of preparation, the Ministry of Health have agreed to issue to the Royal Institute complete lists of schemes showing the stage reached by each. The following are the fifth and sixth lists to be published by the Ministry. Others as received will be printed in the JOURNAL.\*

Local Authorities (who are under statutory obligation to prepare Town Planning Schemes in respect of their areas) that have reported to the Minister during the quarter ended 30 June 1925, that they have passed resolutions deciding to prepare Town Planning Schemes :

- |                                      |   |
|--------------------------------------|---|
| DERBY.<br>Glossop T.C.               | WALES.<br>FLINTSHIRE.<br>Flint T.C.     |
| DEVON.<br>Torquay T.C. (2nd Scheme). | GLAMORGAN.<br>Port Talbot T.C.          |
| STAFFS.<br>Stafford T.C.             | MONMOUTH.<br>Newport T.C. (4th Scheme). |
| West Bromwich T.C.                   |   |
| WORCESTER.<br>Worcester T.C.         |   |

Local Authorities (not being authorities under statutory obligation to prepare Town Planning Schemes, who have voluntarily taken effective steps in the preparation of a Scheme) that have reported to the Minister during the quarter ended 30 June 1925, that they have passed resolutions deciding to prepare Town Planning Schemes :

- |   |   |
|---|---|
| BERKSHIRE.<br>Newbury T.C.  | LANCS.<br>Barton-upon-Irwell R.D.C.<br>(4th Scheme).<br>Littleborough U.D.C.<br>Little Lever U.D.C. |
| CHESHIRE.<br>Knutsford U.D.C.<br>Lymm U.D.C.<br>Macclesfield R.D.C. | MIDDLESEX.<br>Staines R.D.C.  |
| ESSEX.<br>Chelmsford R.D.C.   | SURREY.<br>Walton-upon-Thames U.D.C.<br>(2nd Scheme).   |
| HERTS.<br>Hitchin R.D.C.  | YORKS (W.R.).<br>Birkenshaw U.D.C.  |

Statement showing the Preliminary Statements approved by the Minister of Health for the quarter ended 30 June 1925 :

- |                             |                                   |
|-----------------------------|-----------------------------------|
| Acton T.C. (Areas 1 and 2). | Wallsend T.C. (Areas 1, 2 and 3). |
| Preston T.C.                | Woodford U.D.C.                   |
| Sunderland T.C.             |                                   |

Local Authorities (who are under statutory obligation to prepare Town Planning Schemes in respect of their areas) that have reported to the Minister during the

\* The first list was published in the JOURNAL of 27 June, pp. 526-28.

quarter ended 30 September 1925, that they have passed resolutions deciding to prepare Town Planning Schemes :

- |  |  |
|--|--|
| LEICESTER.<br>Loughborough B.                | STAFFS.<br>Stoke-on-Trent T.C. (3rd Area). |
| LONDON.<br>London County Council (3rd Area). | WARWICK.<br>Coventry T.C.                  |
| MIDDLESEX.<br>Hendon U.D.C. (2nd Area).      | YORKS (N.R.).<br>Eston U.D.C.              |

Local Authorities (not being authorities under statutory obligation to prepare Town Planning Schemes, who have voluntarily taken effective steps in the preparation of a Scheme) that have reported to the Minister during the quarter ended 30 September 1925, that they have passed resolutions deciding to prepare Town Planning Schemes :

- |   |  |
|---|--|
| CHESTER.<br>Bollington U.D.C.<br>Disley R.D.C.    | MIDDLESEX.<br>Staines U.D.C.                       |
| HOYLAK AND WEST KIRBY<br>U.D.C. (2nd Area).       | SALOP.<br>Atcham R.D.C.                            |
| YEARDSLEY-CUM-WHALEY<br>U.D.C.                    | SOMERSET.<br>Minehead U.D.C.                       |
| DEVON.<br>Plympton St. Mary R.D.C.<br>(2nd Area). | SURREY.<br>Carshalton U.D.C. (2nd Area).           |
| ESSEX.<br>Chingford U.D.C.                        | Epsom R.D.C. (Areas 4-9).                          |
| LANCS.<br>Norden U.D.C.                           | WALES.<br>GLAMORGAN.<br>Cardiff R.D.C. (3rd Area). |
| Thornton U.D.C. (2nd Area).                       |  |
| Whitworth U.D.C.                                  |  |

Statement showing the Preliminary Statements approved by the Minister of Health for the quarter ended 30 September 1925 :

- |                         |                                 |
|-------------------------|---------------------------------|
| Great Berkhamstead T.C. | Rochford R.D.C. (Rawreth Area). |
|-------------------------|---------------------------------|

Obituary

A. C. THOMSON [Licentiate].

Mr. A. C. Thomson, who was elected a Licentiate in 1912, died last month at Ayr. A native of Paisley he was trained in Glasgow and went through the Glasgow School of Architecture. Later he became an assistant to Mr. J. R. Hunter, of Ayr, where he started practice for himself about twenty-five years ago. Mr. Thomson's services were much sought after by School Boards before they demitted office, and he was responsible for the design of the following schools—Ladyburn, Greenock, Kerse, Sinclairtown, Ochiltree and Auchinleck. The following tribute is paid to him by a brother architect :

"Mr. Thomson did a considerable amount of work in Ayr and Ayrshire, and beyond the county's confines, and his work was always reticent and refined. Perhaps one of his simplest and best examples is his group of cottages built in the development of a part of Bellevale lands off Monument Road. Interesting in planning, good in material, and picturesque and seemly in an architectural sense, they touch a note rare and unexpected in these days of universal housing schemes and subsidised cottage building ; and Ayr is fortunate above many towns in the possession of a characteristic example of simple, seemly and effective cottage renaissance. Such work is to-day more than ever vital, in that it preserves something of a quality in harmony with nature, and which, like nature, is never strident, assertive or vulgar."

## R.I.B.A. SOIRÉE.

To celebrate the amalgamation of the R.I.B.A. and the Society of Architects, a large number of guests were entertained in the galleries of the Royal Institute on 13 November. The galleries were crowded and the occasion proved most successful.

The guests were received by Mr. E. Guy Dawber, the President, and Mrs. Dawber, supported by Mr. A. J. Taylor, Past President of the Society of Architects, and Mrs. Taylor. Among those present were :—

Lord Parmoor, Lord Riddell, Lord and Lady Olivier, Sir Otto and Lady Beit, Sir William and Lady Llewellyn, Sir George and Lady Frampton, Sir Kingsley Wood, M.P., Sir William Portal, Air Vice-Marshal Sir Sefton Brancker, Sir Frederic Kenyon, Sir Arthur Hirtzel, Sir E. Hodder Williams, Sir Atul and Lady Chatterjee, General Sir Ian Hamilton, Sir Alfred and Lady Butt, Sir Howard and Lady Frank, Sir Francis and Lady Newbolt, Sir Herbert and Lady Ellissen, Sir William and Lady McCormick, Sir Aubrey Symonds, Sir Philip Sassoon, Sir Joseph and Lady Cook, Sir Philip and Lady Gibbs, Sir James and Lady Crichton Browne, Sir Robert and Lady Witt, Sir Philip and Lady Stott, Sir John and Lady Burnet, Sir Charles and Lady Walston, Sir James and Lady Allen, Sir Frederick Radcliffe and Miss Radcliffe, Sir John W. Simpson, Sir Bruce and Mrs. Bruce-Porter, Sir David Murray, R.A., Sir Charles Ruthen, Major-General Sir Gerard and Lady Heath, Sir Henry and Lady Tanner and Miss Tanner, Sir William and Lady Plender; Vice-Chancellor, University of London; Mr. Peter C. Larkin, Mr. and Mrs. George R. Freeman, Mr. and Mrs. George Clausen, R.A., Professor W. H. Wagstaff, Mr. Henry C. Gooch, J.P., Mr. F. Llwisohn, C.I.E., Mr. E. R. Forber, C.B., Mr. and Mrs. Grant Dauber, Rt. Rev. Dr. Charles Gore, Mr. and Mrs. Reynolds Stephens, Mr. and Mrs. Julius Olsson, A.R.A., Mr. and Mrs. Sydney Lee, Brig.-Gen. Mowat, Mr. and Mrs. Granville-Barker, Mr., Mrs. and Miss Hutton Freeman, Professor and Mrs. L. Wilkinson, Mr. and Mrs. Henry Poole, Captain Swinton, Mr. and Mrs. W. Curtis Green, Mr. and Mrs. John Walter, Mr. and Mrs. Arthur Keen, Mr. and Mrs. E. Stanley Hall, Mr. Walter Cave, Mr. E. G. Culpin, Mr. and Mrs. G. Topham Forrest, Mr. and Mrs. L. A. Turner, Mr. and Mrs. Lewis Hind, Mr. Josiah Gunton, Mr. C. F. Doll, Captain C. S. Peach, Mr. and Mrs. Septimus Warwick, Mr. and Mrs. Reid Dick, Mr. and Mrs. Norman Evill, Mr. and Mrs. A. E. Munby, Mr. W. Rees Jeffreys, Mr. and Mrs. Muirhead Bone, Mr. and Mrs. Ralph Knott, Mr. and Mrs. William Walcot, Mr. Charles Marriott, Mr. and Mrs. Alfred Drury, Mr. and Mrs. Stanley Hamp, Mr. and Mrs. G. Fellowes Prynne, Capt. and Mrs. Sutherland-Graeme, Mr. and Mrs. Mervyn Macartney, Mr. Cowles-Voysey, Mr. and Mrs. Evelyn Shaw, Professor S. D. Adshead, Mr. Edmund Wimperis, Mr. and Mrs. H. V. Ashley, Mr. and Mrs. E. J. Partridge, Miss Dawber, Mr. E. J. Horniman, Mr. W. E. Riley, Mr. and Mrs. L. H. Bucknell, Mr. A. N. Prentice, Mr. Arthur Stratton, Mr. Percy Tubbs, Mr. and Miss W. Milburn, Mr. A. Needham Wilson, Mr. William A. Pite, Mr. and Mrs. W. R. Davidge, Mr. and Mrs. Henry M. Fletcher, Mr. and Mrs. H. S. Rogers, Mr. and Mrs. J. E. Franck, Mr. and Mrs. O. P. Milne, Mr. T. E. Eccles, Mr. and Mrs. T. R. Milburn, Mr. and Mrs. H. A. Crouch, Mr. and Mrs. P. T. Hiorns, Mr. W. J. McWilliam, Mr. E. J. May, Mr. Horace Gilbert, Mr. Thomas Wallis, Mr. C. Harrison Townsend, Mr. and Mrs. P. W. Hubbard, Mr. A. Seymour Reeves, Mr. and Mrs. Digby L. Solomon, Mr. P. M. Fraser, Mr. Basil Oliver, Mr. Noel D. Sheffield, Mr. and Miss H. W. Wills, Mr. C. E. Bateman, Mr. Godfrey Pinkerton, Mr. and Mrs. T. H. B. Scott, Mr. and Mrs. Charles McLachlan, Mr. Alfred Yeates, Mr. and Mrs. George Heilbuth, Sir Robert and Lady Lorimer, Mr. Gilbert Bayes.

## Allied Societies

## LIVERPOOL ARCHITECTURAL SOCIETY.

MR. E. B. KIRBY'S PRESIDENTIAL ADDRESS, 1925-26.

21 October 1925.

In the course of his address Mr. Kirby said :

I am not old enough to recall the spirit of this Society in days gone by but, to quote merely my own opinion. I am satisfied that there exists to-day a greater community of interest, a stronger spirit of comradeship and less jealous suspicion among architects in this city and its environs than was the case even ten years ago. If I am right in this respect I am glad to think that it is a local reflection of a national phenomenon. The governing body of the profession has never been so powerful or so united, and what experience I have been able to obtain of other provincial societies affords evidence to the same effect.

Although I believe we have just cause for congratulation in this matter I do not intend to imply that no more remains to be done. For some psychological reason which I, for one, cannot attempt to explain, members of our profession are conspicuously apathetic to their corporate interests. Corporate understanding and action are so obviously valuable, not only to the profession as a whole but even to the most selfish interests of its individual members, that I have never been able to understand why so many architects stand aside and devote their mental energies solely to destructive criticism. If Achilles had done no more than sulk in his tent it is doubtful whether the modern schoolboy would ever have heard of him.

One is constantly asked why the Society does not protest against this, or insist on that, or bring pressure or persuasion to bear on someone to do something they do not wish to do or abstain from something they propose.

In fact the Council of the Society have frequently intervened with effect in the interests of its members. In those cases where it has failed to do so the reason is fairly obvious. If you want to shake the big stick in someone's face you must first provide yourself with a big stick to shake of greater solidity than a roll of drawing paper. If you desire to exert pressure or persuasion you must be assured of united conviction. You must inspire with respect or fear the persons you wish to impress, and you should satisfy yourselves that your action stands a reasonable chance of success. If any of these conditions, especially the last, are absent, in my opinion such action may be productive of more harm than good and tend to lessen rather than to enhance the prestige of the Society. I do not think I am conspicuously timid in championing our interests, but so long as I have any voice in the counsels of this Society I shall not be a party to dissipating its energies in conflicts which are already lost or in crashing our heads against stone walls. If the interests of our profession are to be advanced in any public issue which involves important bodies other than our own, it may be taken for granted that we are unlikely to attain our ends by direct assault on our own initiative.

Anyone who has experience of such matters will agree that it is necessary carefully to prepare the ground beforehand and, if possible, to inspire and enlist the support of



the public. The only way in which the latter can be done effectively is by means of the Press, and here we are confronted with a difficulty of no slight character almost involving the constitution of a publicity department. I am not sanguine that there would be many candidates for such an office and I should not like to be construed as advocating it. One of our Vice-Presidents has done much useful work in presenting to the general public the architects' point of view, but I doubt whether even he could hazard a guess as to the extent of fruitful ground upon which the seed has fallen.

The tangible visible presentment of this city, those distinctive features which define its identity and differentiate it from others are mainly displayed in its buildings. No representation of Liverpool could possibly be identified without them. In fact it is no exaggeration to say that the designers of these buildings, *i.e.*, the architects, have, for better or worse, made the material character of Liverpool what it is. No other feature or manifestation of its individuality has anything like the same degree of permanent characterization. On the principle that the better the architect the better the building—the better the building the better the city—it might be expected that the responsible authorities who express their pride in the external appearance of the city would hold members of our profession in no small esteem and avail themselves of their expert advice in matters appertaining to their craft. One might even go further and assume that the architectural activities of the Corporation would naturally be entrusted to qualified and responsible architects of the highest attainments and widest experience.

Instead of this a somewhat odd condition of affairs has existed for some time past. The administration of the ratepayers' interests and money is entrusted to a qualified professional adviser in all departments save one. The legal, medical, financial, surveying and engineering activities of the city are each in the control of a qualified professional man of the highest attainments procurable. Moreover, the city authorities play a commendable part in the patronage of some of the arts, notably painting and music. Instead of relegating such matters to, let us say, the Inspector of Nuisances, they obtain the best expert advice they can. The solitary exception made is in the case of the Mother of the Arts whose local manifestation is not merely an aspect of Liverpool's life, but almost actually *is* Liverpool. She is relegated to the position of Cinderella, to be casually adopted by any stranger who can find space and leisure to provide for her needs.

In other words the direction of those important municipal building activities on which so many thousands of pounds are annually expended is entrusted to gentlemen of other professions.

To any architect this constitutes an amazing state of affairs. Its justification was, however, pleaded not so long ago by two important Corporation officials. The contents of the memorandum in which their views were expressed were of such a character as to indicate almost complete misapprehension of the functions of an architect and of the obvious advantages which accrue from his employment. The fact that these gentlemen did not and, perhaps, could not be expected to appreciate the mis-

leading character of some of the views they expressed is in itself one of the strongest possible arguments why the shoemaker should stick to his last and why the architectural enterprises of this City should not be entrusted to the control of members of other professions however eminent they may be in that sphere to which their training fits them.

We are informed that there are "several fine young architects in the Surveyor's Department." Is this a matter of congratulation to anyone but the Surveyor, who has acknowledged that he is already fully occupied with his own work? I wonder what practical experience these young architects possess or with what measure of direct responsibility they are entrusted. One is tempted to speculate on how the department of the Medical Officer of Health would fare if it were staffed with promising medical students under the direction of a sanitary engineer, for instance.

The financial difficulties attendant on the appointment of a municipal architect at the present time are, however, obvious, and I doubt whether we should be justified in complaining of the resolution which the City Council have passed this afternoon, especially in view of the policy they have confirmed of putting out to premediated competition large or important architectural schemes.

There still remains the routine work which, though it does not come within that category, cannot fail to be considerable. It seems hardly practical to suggest that all such work should be referred to architects in private practice. I submit that in this respect the appointment of a municipal architect of suitable qualifications is worthy of our support provided that the definition of what work comes within his scope should leave no ground for misconstruction. To what extent this qualification may prove to be effective is a more doubtful question. I have good reason for thinking that the City Council would not decline to consider any views this Society might think fit to advance before a final decision is arrived at. You will observe that the terms of the resolution contain the words "at present."

To conclude this subject I hope that these remarks will not be construed as an attack upon the Municipal Authorities. They are merely intended to draw attention to existing facts which I conceive to be contrary to the interests of good municipal architecture, and to repudiate certain public statements of responsible officials which, doubtless without any such intention on their part, are nevertheless, in my opinion, calculated to create an entirely erroneous impression on the general public regarding the architectural profession.

You have already been advised of the constitution of a Standing Joint Committee composed of members of this Society and of the local Building Trade Employers' Federation with a view to adjusting the difficulties and differences which already exist or may from time to time arise. The points of agreement which have already been determined by the Committee and have been confirmed by the Councils of the respective bodies concerned have been promulgated to the members of both Societies. I anticipate that both the constitution of such a Committee and also its recommendations may not meet with the unqualified approval of staunch upholders of the doctrine

of the Divine Right of Architects. I feel most strongly that any opposition to dealing sympathetically and justly with real grievances advanced by those who are so intimately associated with us in our work would contribute neither to the credit nor the interest of our profession. What experience I have of such matters leads me to the conclusion that those architects of the widest experience and the largest practice are the most ready to recognise and remedy such grievances.

Of course the deliberations of this Committee are not confined solely to one point of view. There are one or two thorns which have for some time been irritating architects and which are due for extraction. The Honorary Secretary would be glad if members would acquaint him of any matters which they desire to bring to the notice of this Committee.

I should like to avail myself of this opportunity of offering to Professor Reilly and the staff of the University School of Architecture the warm congratulations of this Society on the conspicuous and well-deserved success which their training has achieved and to those students who have won the highest awards which their profession has to offer. I refer, of course, to the Prix de Rome Scholarship, the R.I.B.A. Henry Jarvis and the R.I.B.A. Silver Medal for recognised schools.

There is no need for me to elaborate the quality of this magnificent achievement with which you are all sufficiently familiar beyond saying that it establishes beyond question the eminence of this school.

Here in Liverpool we have the senior provincial Architectural Society, and what has, I submit, been proved to be the best School of Architecture in the country. It seems obvious and inevitable that there should exist the closest union and alliance between these two bodies. Their interest and development appears to me to be inseparable and interdependent. I am less surprised by the increasing recognition of this fact than by the lack of mutual understanding and appreciation which I understand to have existed in the dark ages. Pride and partisanship in favour of one's own organisation are admirable and proper sentiments, but I say without fear of contradiction that anyone who attempts to exploit the interests of either of these bodies to the detriment of the other is guilty of grave disservice to both.

In my opinion, one of the most important duties the President has to perform is the representation of this Society on the Council of the R.I.B.A. and the Allied Societies' Conference. My predecessors in this office will, I am sure, support me in saying that the position and influence of this Society on those bodies is very far from being a negligible quantity. When I first attended these London meetings as your representative I found a traditional respect for this Society already well established and I was well content to aim at not lessening it.

The present session of the R.I.B.A. inaugurates a departure from precedent which should afford a welcome relief to representatives of distant provincial societies. It was found that the volume of business requiring the attention of the Council at their fortnightly meetings was becoming so great that questions demanding grave consideration suffered from the competition of mere matters

of routine. An Executive Committee has consequently been appointed who will meet once a fortnight and deal with the agenda with a view to disposing of questions of lesser moment and to deciding on appropriate matters for reference to the full Council, whose meetings will in future occur only once a month. This arrangement is at the moment experimental, but it is hoped that it will prove so beneficial as to assume a permanent character.

Owing to the comparative smallness of our membership this Society is only entitled to representation on the Council of the R.I.B.A. for two years out of every three. Next year we shall, therefore, fail to be represented unless it should happen that my successor is already an elected member of the Council.

The thing which has most impressed me during my term of office on the Council of the R.I.B.A. is the influence, the keenness, the comradeship and loyalty of the representatives of the Allied Societies.

#### NORTHERN ARCHITECTURAL ASSOCIATION, SESSION 1925-6.

Mr. G. Reavell [F.] delivered his inaugural address before the Northern Architectural Association on 21 October. After referring to the outstanding success of the meeting, at Newcastle-upon-Tyne, of the R.I.B.A. and the Allied Societies, Mr. Reavell, in the course of his speech, said:

The adoption by the City Council of the line of the proposed new street is the great event of the year. It must be a matter of satisfaction to this Association that the scheme of Mr. Burns Dick has become virtually the official scheme. It is no easy matter to drive a new road through an ancient city and doubtless many technical difficulties will arise to worry the City Engineer, but they are safe in his capable hands. What does matter is that instead of legislating from hand to mouth, frittering away money by a few thousands here and another few thousands there, paring down expensive frontages and eventually being little further forward, a comprehensive scheme has been adopted which will clear away a great deal of poor property, give a wide and direct thoroughfare from the new bridge to the North Road, afford valuable business sites and, in the end, add enormously to the rateable value of the city. There are sure to be critics and cavillers. No doubt there were such in the days of Dobson and Grainger, but who in Newcastle to-day would question their wisdom and foresight?

The fusion of the Royal Institute and the Society of Architects, foreshadowed in Mr. Jones's address last year, has been completed. It is now the duty of all of us to strengthen the parent body and to help thereby more efficient education of the younger and more efficient administration by the older members of the profession.

In this connection I would utter a word of warning concerning a circular, which, no doubt, most of you have received, purporting to establish "The Incorporated Association of Architects and Surveyors." It is issued under an obscure name and not one single architect, obscure or otherwise, appears to be connected with the formation of this precious association. It professes to give "degrees," but as for a time not stated these degrees do not require an examination, and are to be had practically for the asking, plus your subscription, the



will tend to make the recipients a laughing stock. The ostensible reason for the formation of the Association is to protect practitioners who are not members of the R.I.B.A. when legislation is asked for to obtain registration. You may take it from me, to begin with, that the R.I.B.A. will not ask for anything that does an injustice to anyone who has previously been making his living by architecture or surveying, and you may be soundly assured that no British legislature would pass such a bill.

A new society would be detrimental both to those connected with and those detached from the Institute. Against the former it would rake in all sorts of people and give them a *quasi*-professional standing which would be detrimental to genuine architects; against the latter it would, if successful, undo all that has been achieved during the past few years for the solidarity of the profession, and by its very success remove all chance of united professional progress. "United we stand, divided we fall." Let us as a profession speak through the Institute with a single voice, and in matters of protection we shall have ten times the result, and in matters of education immeasurably more.

A pleasing incident during the year has been the election of our very popular member and past President, Mr. T. R. Milburn, to a vice-presidency of the R.I.B.A. There is but one higher honour the Institute can bestow; whether that too is to be Mr. Milburn's some day, or whether he has set the pace for another, perhaps but a student here this evening, time alone can reveal.

Another matter that has been growing in interest during the last few years, particularly in the post-war period, is the training of young architects. The old system was for an aspirant to serve his articles with a practising architect, and it was a system that turned out a large number of good men. When the architect had a good sound practice, a good architectural library, and a disposition to help and advise the pupil, and he, on his part, was inclined to study and to burn a little of the midnight oil, the results were generally satisfactory, but, alas! in many cases, pupilage was undertaken with little sense of responsibility on either side, and at the end of it an unlucky youth was turned out to find that he was totally unqualified to undertake the duties of an architectural assistant. The trend of opinion now is strongly in favour of an academical training of five years, in the last two of which part time is worked in an architect's office. It is not perfect. Nothing in this world is. It seems, however, the best attainable compromise, and responsible architects are now turning proffered pupils into this route. The result will be watched with keen interest. It should, however, not be forgotten that the profession is overcrowded, and it is cruelty to start a youth upon it unless there is a chance to equip him adequately for the struggle.

Professor, principal and pupil alike, must see that in the latter part of his training the student has ample opportunity to familiarise himself with real buildings. Steel construction, fire-resisting arrangements, heating appliances, ventilation, electric equipment, sanitation, and costs of other details must be welded into a compact whole, and can only be so welded by one who is familiar with actual modern problems.

## REGISTER OF ARCHITECTS WILLING TO TAKE RECOGNISED SCHOOLS STUDENTS IN THEIR OFFICES.

On the recommendation of the Board of Architectural Education, the Council have decided to establish at the office of the R.I.B.A. two registers:

- (1) a register of advanced students of recognised schools.
- (2) a register of the names of architects willing to take such students.

The intention is in this way to assist advanced students up to the stage of the completion of their qualifications for exemption from the Final Examination; one of the qualifications for exemption from the Final Examination being twelve months' experience in an office during the fourth and fifth years of the school course.

The Council hope that general use will be made of the registers, and that as many architects as possible will place their names upon the register.

## NOTES FROM THE MINUTES OF THE COUNCIL MEETING.

2 November 1925.

### WATERLOO BRIDGE.

It was decided to send to the London County Council the letters received from the President of the American Institute of Architects and the Franco-British Union of Architects on the subject of the preservation of the Bridge.

### CAMBRIDGE SCHOOL OF ARCHITECTURE.

Six drawings of a Terminal Railway Station by the late J. M. Whitelaw (Soane Medallist, 1913) were presented to the Cambridge School of Architecture.

### THE BOARD OF ARCHITECTURAL EDUCATION.

A comprehensive scheme for the reconstitution and enlargement of the Board of Architectural Education was approved by the Council and will be brought into operation forthwith.

### R.I.B.A. EXAMINATIONS.

On the recommendation of the Board of Architectural Education it was decided:

1. To require students entering courses recognised by the R.I.B.A. to become registered as Probationers immediately upon entering such courses.
2. To urge upon students the extreme importance of availing themselves, when they become eligible, of exemption from the R.I.B.A. Intermediate Examination and subsequent registration as Students R.I.B.A.
3. To urge students eligible for exemption from the R.I.B.A. Final Examination to sit for the R.I.B.A. Examination in Professional Practice, and thus qualify themselves under the usual conditions for candidature as Associates R.I.B.A.

### R.I.B.A. VISITING BOARD.

The reports of the Visiting Board on the following Schools were accepted by the Council:—

1. School of Architecture, Birmingham.
2. School of Architecture, University of Sheffield.
3. School of Architecture, Armstrong College, Newcastle-upon-Tyne.
4. School of Architecture, Leeds School of Art.

### "THE ARCHITECT AND HIS WORK."

A pamphlet entitled "The Architect and His Work," prepared by the Practice Standing Committee, is to be published forthwith.

### QUALIFIED ARCHITECTS AND HOUSING SCHEMES.

Steps are to be taken to call the attention of the Minister of Health to the failure of local authorities to employ qualified architects in connection with their housing schemes, and to urge him to take steps to ensure that in future only qualified architects are employed on this work.

### RESTRICTIONS ON TENDERING.

The Council decided to advise members of the R.I.B.A. that where any contractor or firm of contractors invited by them to tender, acting under the rules of any branch of the National Federation of Building Trades Employers, informs them that his tender is conditional on certain action being taken by the architect in respect to inviting any other contractor or firm of contractors to tender, the architect should convey the information to his clients and act upon the instructions he receives.

### THE ARCHITECTS' BENEVOLENT SOCIETY.

A grant of £100 was made to the Architects' Benevolent Society.

### THE BRITISH WATERWORKS ASSOCIATION.

Mr. H. D. Searles-Wood [F.] and Mr. P. M. Fraser [F.] were reappointed to represent the R.I.B.A. on the Standing Committee on Water Regulations.

### THE BRITISH ENGINEERING STANDARDS ASSOCIATION.

The following were appointed to represent the R.I.B.A. :—

Sectional Committee, 15s. on Vitrified Ware Pipes : Mr. D. R. Tucker.

Sub-Committee, 16s. 5d. on Cast Iron, Half Round, O.G. and other Moulded Gutters : Mr. C. F. Skipper, Mr. Max Clarke.

Sectional Committee, 32s. on Sand-Lime Bricks : Mr. T. Wallis, Mr. H. D. Searles-Wood.

Sub-Committee, 32s. 1d. Materials and Manufacture : Mr. T. Wallis, Mr. H. D. Searles-Wood.

### MEMBERSHIP OF THE R.I.B.A.

The resignations of the following members were accepted with regret :—

F. S. Baker [F.].

V. A. Lawson [L.].

The following were reinstated as members of the R.I.B.A. :—

W. S. R. Bloomfield as Associate.

R. T. Tilley as Licentiate.

### A.B.S. SCHEME OF PROFESSIONAL INSURANCE.

The A.B.S. negotiates all kinds of Life Assurance: Whole Life, Endowment, Educational, Children's and Partnership Assurance. The Society is not tied to any insurance office, and is prepared to offer and advise upon a wide choice of policies in leading companies. Half the initial commission is returned to the assured in the form of rebate, and the other half forms a direct contribution to the Society's funds.

Please address all enquiries to the Secretary, Architects' Benevolent Society, 9 Conduit Street, W.1. Telephone: Mayfair 434.

## Notices

### THE THIRD GENERAL MEETING.

The Third General Meeting (Business) of the Session 1925-26 will be held on Monday, 30 November 1925, 8 p.m., for the following purposes :—

To read the Minutes of the General Meeting (Ordinary) held on 16 November 1925 ; formally to admit members attending for the first time since their election or transfer

To proceed with the election of candidates for membership whose names were published in the JOURNAL for 7 November 1925 (pp. 25-30).

The Council will propose that Bye-law 25 be amended as follows :—

"25.—Any charge under the preceding Bye-law 24 must be preferred in writing and signed and forwarded to the Secretary, who shall lay it before the . . ." etc. as printed down to ". . . such record and publication."

"During the period of suspension the member shall not be entitled to use the title 'Chartered Architect' or the affix of the class to which he belongs, nor shall he be entitled to the use of the Library, attendance at Institute Meetings or right of voting, and his name shall not be printed in the list of members in the 'Kalendar' during the period of his suspension and he shall return his Diploma for such period. Before any member so suspended is reinstated the Council shall consider any further complaints as to his professional conduct during his period of suspension, and if not deemed satisfactory may decree a further period of suspension or his expulsion, in either case the above procedure of announcement and publication shall again be followed.

"Provided always . . ." etc., to end of Bye-law as printed.

### ELECTION OF MEMBERS.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that, if they wish to take advantage of the election to take place on 15 February 1926, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than 28 November 1925.

### LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provision of Section IV, clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A. stating the clause under which they propose to apply for nomination.

## Competitions

### PROPOSED NEW SCHOOL, GOSPORT.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.



# GUISBOROUGH PROPOSED NEW HOSPITAL.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

# PORTSTEWART GOLF CLUB COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

# INTERNATIONAL COMPETITION.

The Fédération Internationale du Bâtiment et des Travaux Publics are organising an International Competition with a view to promoting and facilitating the construction of houses for the middle classes and intellectual workers. Prizes to the value of 500 dollars, 300 dollars and 200 dollars are being offered by Mr. Willard Reed Messenger, engineer, of New York, for a memorandum, either in English or French, not exceeding 5,000 words, accompanied by sketches. Particulars of the competition have been deposited with the Secretary R.I.B.A. and can be obtained on application to him at No. 9 Conduit Street, London, W.

# RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

# LEAGUE OF NATIONS.

# COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9, Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 30 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of assessors.

# THE NEW INSTITUTE FOR THE BLIND, BUENOS AIRES, ARGENTINE REPUBLIC.

An International Competition has been promoted for the Argentine Institution for the Blind, Buenos Aires, Argentine Republic.

A small number of copies of the conditions have been deposited in the R.I.B.A. Library for the information of British Architects who may desire to compete.

A booklet containing the full text of the conditions with other information (translated from the Spanish) and a plan of the ground on which the Institution is to be erected is available for inspection at the Department of Overseas Trade (Room 42), 35 Old Queen Street, London, S.W.1.

# PROPOSED NEW COLLEGE BUILDINGS, LIVERPOOL COLLEGE.

Proposed New College Buildings to be erected on a site in Queen's Drive, Mossley Hill, Liverpool. Assessor, Sir Giles Gilbert Scott, R.A. Premiums £500, £300 and £200 are offered. Last day for questions, 30 September 1925. Conditions may be obtained by depositing £2 2s. Designs to be sent in not later than 1 January, 1926.

# AUSTRALIAN WAR MEMORIAL—CANBERRA.

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon, on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

# TOPSHAM PUBLIC HALL COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

The promoters of the above competition have decided to amend the conditions in accordance with the R.I.B.A. regulations and have asked the President to appoint an Assessor.

# PROPOSED BRANCH LIBRARY FOR GABALFA.

Proposed branch library to be built on a site in St. Athan Road, Gabalfa. Assessor, Mr. Sidney K. Greenslade [F.]. Premiums, £75, £50 and £30 are offered. Last day for questions, 7 December 1925. Designs to be sent in not later than 12 noon on 16 January 1926. The competition is limited to properly qualified architects within the City of Cardiff. Conditions may be obtained from Harry Fan, Librarian, Central Library, Cardiff, by depositing £2 2s.

## Members' Column

### CHANGE OF ADDRESS.

Mr. ARTHUR ASHTON [F.] has removed his office from Clifton Chambers, St. Annes-on-the-Sea, to 33 Parade, Leamington Spa.

### APPOINTMENT VACANT.

ASSISTANT ARCHITECT.—Second senior required immediately; long period for right man. Practical knowledge and experience essential in factory and commercial work. Competent in design, construction, details, specifications and usual routine.—Apply, by letter only, stating age, salary, references, etc., to F.R.I.B.A., 33 Parade, Leamington Spa.

### TRADE CATALOGUES.

Mr. HENRY A. PORTER, Senior Architect, Public Works Department, Lagos, Southern Provinces, Nigeria, would like to receive as many duplicate catalogues as possible from English manufacturers.

### OFFICE ACCOMMODATION TO LET.

MEMBER offers private office, together with use of general office, telephone, clerical and tracing assistance; £65 per annum, inclusive. Near Gray's Inn.—Box 6501, c/o Secretary R.I.B.A., 9 Conduit Street.

## Minutes II

### SESSION 1925-1926.

At the Second General Meeting (Ordinary) of the Session 1925-1926, held on Monday, 16th November 1925, Mr. E. Guy Dawber, F.S.A., President, in the Chair. The attendance book was signed by 19 Fellows (including 6 Members of the Council), 18 Associates (including 1 Member of the Council), 6 Licentiates, and a large number of visitors, including many students of the Architectural Schools.

The Minutes of the First General Meeting, held on 2nd November 1925, having been taken as read, were confirmed and signed by the Chairman.

The Hon. Secretary announced the decease of the following Members:—

### FELLOWS.

WILLIAM MORTON COWDELL, elected Fellow 1906, a Past-President of the Leicester and Leicestershire Society of Architects and a representative of that body on the R.I.B.A. Council during the Session 1910-1911.

LT.-COL. PETER GEORGE FRY, C.M.G., D.S.O., elected Licentiate 1910, Fellow 1920.

ALBERT HOWELL, elected Fellow 1907.

JOHN ALBERT GILL-KNIGHT, elected Associate 1891, Fellow 1913.

HARRY DIGHTON PEARSON, elected Associate 1899, Fellow 1907.

### RETIRED FELLOWS.

JAMES JERMAN, elected Associate 1876, Fellow 1887, transferred to Retired List 1923. Mr. Jerman was a Past-President of the Devon and Exeter Architectural Society and a representative of that body on the R.I.B.A. Council during the Session 1895-96.

CHARLES HENRY SAMSON, elected Fellow 1887, and transferred to Retired List in 1917.

FREDERICK WILLIAM TARRING, elected Fellow 1890 and transferred to Retired List in 1923.

ALEXANDER ROSS, LL.D., elected Fellow 1893, and transferred to Retired List in 1923.

STEPHEN ERNEST SMITH, elected Associate 1867, Fellow 1881, transferred to Retired List in 1919.

### ASSOCIATE.

ERNEST THOMAS JAGO, elected Associate 1906.

### LICENTIATES.

MILES BARON, elected Member of the Society of Architects 1924, transferred to Licentiate R.I.B.A. 1925.

VERE CALVERT, elected Licentiate 1910.

PERCY WILLIAM FYSH, elected Member of the Society of Architects 1919, transferred to Licentiate R.I.B.A. 1925.

DAVID DAVIES, elected Member of the Society of Architects 1888, transferred to Licentiate R.I.B.A. 1925.

NOEL ALFRED FITZHERBERT HASLEWOOD, elected Member of the Society of Architects 1920, transferred to Licentiate R.I.B.A. 1925.

ROWLAND LLOYD JONES, elected Member of the Society of Architects 1903, transferred to Licentiate R.I.B.A. 1925.

CHARLES MESSERVY, elected Licentiate 1911.

ALEXANDER CALDWELL THOMSON, elected Licentiate 1912.

### RETIRED MEMBER OF THE SOCIETY OF ARCHITECTS.

CHARLES NEWSON, elected Member of the Society of Architects 1912, and retired in 1923.

### HON. ASSOCIATE.

COLONEL FRANCIS SEYMOUR LESLIE, elected Hon. Associate in 1918.

### HONORARY CORRESPONDING MEMBERS.

COMMENDATORE GIACOMO BONI, Director of the Excavations of the Roman Forum, elected Hon. Corresponding Member 1886.

Commendatore Boni contributed a Paper to the R.I.B.A. JOURNAL in June 1898 on "The Lagoons of Venice"; also a Paper on Architectural Education in Italy, which will shortly be published in the Book of Proceedings of the International Congress on Architectural Education held in London last year.

JEAN THEOPHILE HOMOLLE, of Paris, elected Hon. Corresponding Member 1897.

It was Resolved that the regrets of the Institute for their loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

The following member attending for the first time since his transfer was formally admitted by the President:—

MR. R. HARDY-SYMS, Licentiate.

Dr. Raymond Unwin [F.], having read a Paper on "The Architect and His City," and illustrated it by lantern slides, a discussion ensued, and on the motion of Mr. G. L. Pepler, Past-President of the Town Planning Institute, seconded by the Very Rev. G. K. A. Bell, Dean of Canterbury, a vote of thanks was passed to Dr. Unwin by acclamation, and was briefly responded to.

The meeting closed at 10.10 p.m.

Arrangements have been made for the supply of the R.I.B.A. JOURNAL (post free) to members of the Allied Societies who are not members of the R.I.B.A. at a specially reduced subscription of 12s. a year. Those who wish to take advantage of this arrangement are requested to send their names to the Secretary of the R.I.B.A., 9 Conduit Street, W.1.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

### R.I.B.A. JOURNAL.

Dates of Publication.—1925: 7th, 21st November; 5th, 19th December. 1926: 9th, 23rd January; 6th, 20th February; 6th, 20th March; 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

THIRD SERIES

VOL. XXXIII. No. 3

5 DECEMBER 1925

## Contents for 5 December 1925

	Page
DRAWING BY MAURO TESI .. .. .	<i>To face</i> 67
MODERN TENDENCIES IN FRENCH ARCHITECTURE. By H. P. Cart de Lafontaine .. .. .	67
BENEDETTO CROCE. By W. E. Vernon Crompton .. .. .	72
REVIEWS :	
A History of English Brickwork. By Sydney D. Kitson .. .. .	74
A Short History of the Building Crafts. By Basil Oliver .. .. .	79
Report of Birmingham Civic Society. By Professor C. H. Reilly .. .. .	80
Prelude to Architecture. By A. S. G. Butler .. .. .	81
Everyday Life in Roman Britain.. By W. T. Benslyn .. .. .	81
Francesco Borromini. By H. C. Hughes .. .. .	81
LIBRARY NOTES .. .. .	82
THE DEATH OF QUEEN ALEXANDRA .. .. .	83
COMMEMORATION OF THE CENTENARY OF THE BIRTH OF CHARLES GARNIER .. .. .	84
CORRESPONDENCE ..	
The Selection of Stone for Building. By A. P. Laurie .. .. .	84
Association of Architects and Surveyors. By Major Harry Barnes .. .. .	84
TOWN PLANNING .. .. .	85
NATIONAL HEALTH INSURANCE .. .. .	87
EXAMINATION FOR THE R.I.B.A. DIPLOMA IN TOWN PLANNING .. .. .	87
THE R.I.B.A. (HENRY JARVIS) EX-SERVICE SCHOLARSHIPS .. .. .	87
OBITUARY :	
C. H. Samson .. .. .	87
SCIENCE STANDING COMMITTEE .. .. .	88
A.B.S. SCHEME OF INSURANCE .. .. .	88
NOTICES .. .. .	88
COMPETITIONS .. .. .	89
MEMBERS' COLUMN .. .. .	90
MINUTES .. .. .	90



FROM AN ORIGINAL DRAWING BY MAURO TESI (1730-66)

R.I.B.A. Collection





EGLISE SAINT-LOUIS A VINCENNES. (Façades latérale et postérieure)  
Droz et Marrast, Architects

## Modern Tendencies in French Architecture

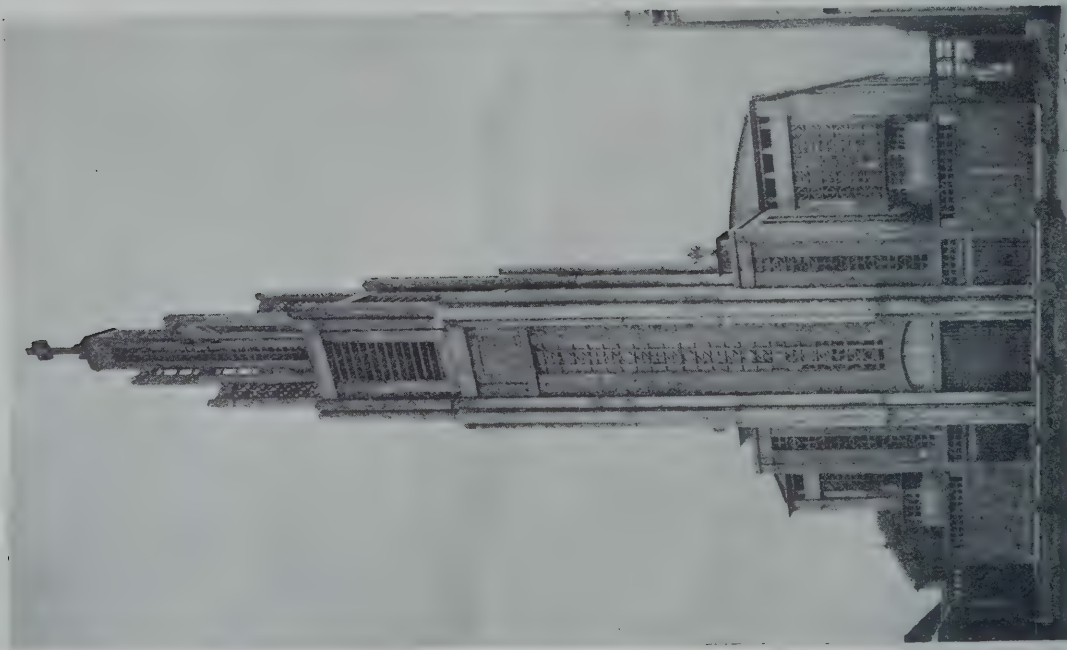
BY H. P. CART DE LAFONTAINE, O.B.E. [A.]

ARCHITECTURE in France, generally more influenced by current thought and life than is the case in our conservative and less impressionable country, now appears to be emerging from the skilful and masterly use of a classic architectural alphabet towards a new method of self-expression which is based on modern constructional possibilities, with a consequent readjustment in the proportion of voids and solids in plan and elevation.

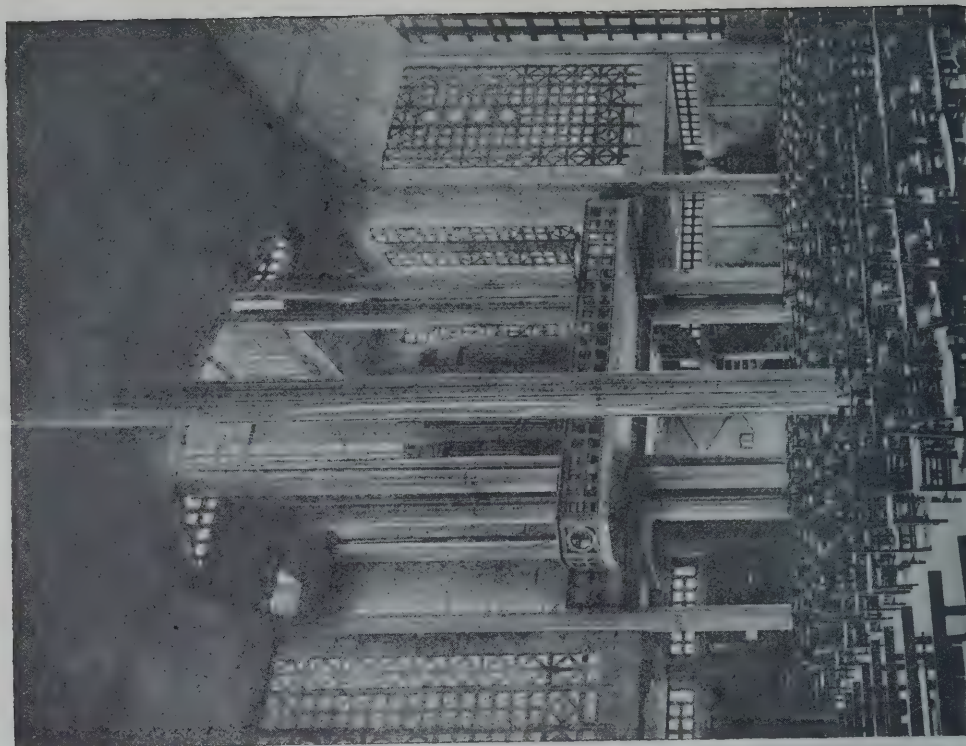
It may seem strange to those who have no personal experience of the training of the architect and the French National School, to find that this new orientation of architectural conception and composition has its roots in this very school; but such, I believe, is the case.

And those who took part in the recent International Congress on Architectural Education will remember that the French delegates drew attention to the two strong currents of architectural thought which exist in France at the present time, commenting on the way in which new constructional possibilities are gradually transforming preconceived standards of proportion and beauty.

At the last annual congress of French architects a paper on the future development of architecture was read by Monsieur Louis Hauteœur, a well-known authority on French architectural history, in which, speaking of the two schools of thought in French architecture to-day, he says: "The partisans of traditional style criticise, in modern architecture, those things which are the least important; that is, the external forms which shock them, but which are the inevitable manifestation of an effervescent age and of ever-changing time. The partisans of modern art who desire to express the needs of to-day adequately and who understand the great law of human development reproach the partisans of classic art for their 'traditional' spirit. It is true to say that in some cases there is a blind attachment to past forms, but in many cases the origin of this attachment to known forms is the appreciation of eternal laws and the inherent qualities of the race. Starting from such widely separated viewpoints, both sides run the risk of never being able to arrive at a common view of this new architecture. Perhaps, therefore, an examina-



EGLISE NOTRE DAME LE RAINCY. (Façade)  
A. et G. Perret, Architects



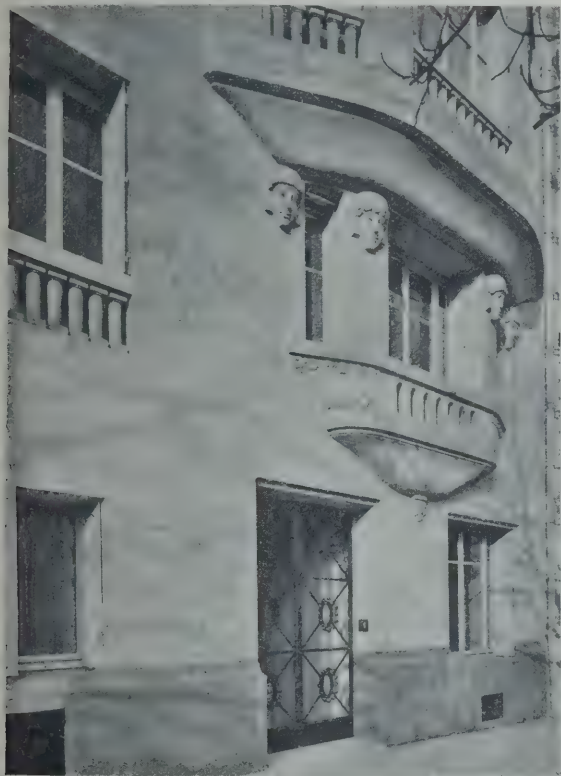
EGLISE NOTRE DAME LE RAINCY. (Tribune sous le Clocher)  
A. et G. Perret, Architects



tion of the artistic evolution of architecture will enable us to appreciate what there is of truth in each of these viewpoints.

Architecture stands to-day in a position very similar to that which existed at the commencement of the sixteenth century. After a reign of about four centuries, Gothic art in France was dying. The master of the works continued to use his system of construction, to design in pointed arches, pinnacles, gables, and rose windows. But a new style had been

and seventeenth centuries often retained the constructional methods of the Middle Ages and merely changed their decorative grammar, to-day the appearance of novel materials and new methods of construction has modified the very essentials of architecture."



MAISON DE RAPPORT. Avenue du Président-Wilson, à Paris. (Porte d'entrée)  
H. Tauzin, Architect



MAISON DE RAPPORT. Avenue du Président-Wilson, à Paris. (Façade)  
H. Tauzin, Architect

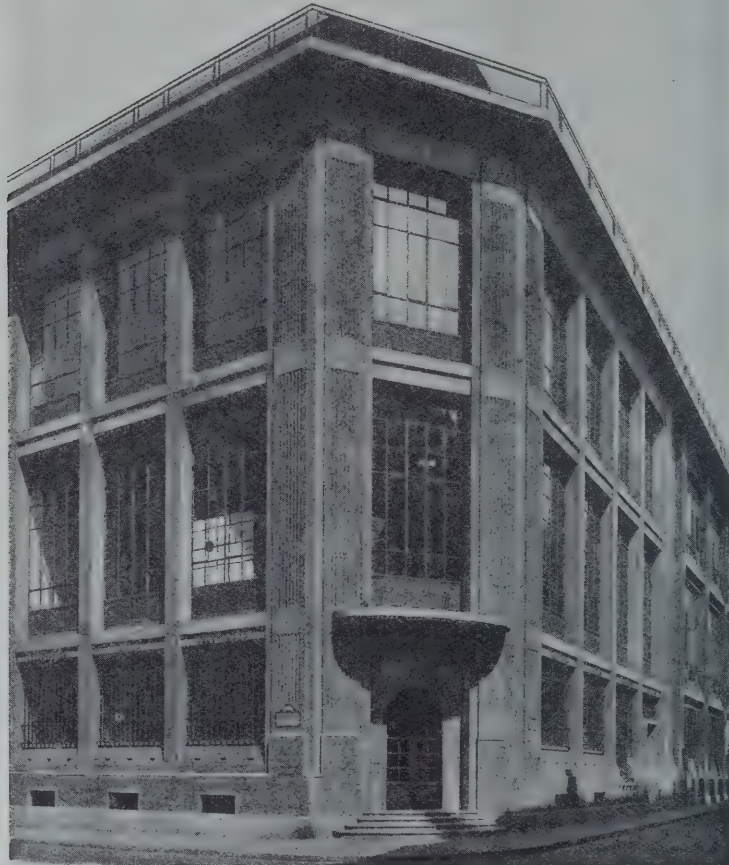
born, that of the Renaissance. It was, at first, confined to decorative artists, sculptors, or painters; but was soon adopted by the architects. . . . To-day the descendants of these innovators are, in their turn, piously and faithfully attached to the rules which for the past four hundred years have imposed themselves on art in our country. But other architects champion the excellence of new principles. They have themselves been preceded by decorators; but the difference between the conditions of the present day and those of the period of the Renaissance is profound. Whereas the architects of the sixteenth

Monsieur Hauteœur goes on to trace the influence of the industrial development and inventions on architecture; the period of eclecticism which followed the archæological finds in Greece and Rome, the gradual destruction of beauty by mass production in furniture and decoration, and the more recent

stimulus to architectural invention by the possibilities of concrete and ferro-concrete, where the construction is concealed by wall coverings (as in Roman times) rather than accentuated as in the mediæval styles.

He points out that the architectural styles of Louis XIII, Louis XIV, Louis XV, and Louis XVI are very different from one another, but that to-day we observe more particularly the general resemblance between them and call them the "classic style,"

for proportion and balance is the same ; and Viollet-le-Duc was right when he wrote : ' Art does not consist in this or that form, but in a principle, in a logical method, and there is consequently no basis for saying that any one form of art is *art*, and that all else beside it is barbarous.' . . . It is the task of the educated artists, richly endowed with a great tradition, to adapt to new methods and new needs an architecture which should be neither foreign to our country nor



BUREAU DE POSTE. Angle rue du Conservatoire et rue Bergère à Paris (Façade)  
F. Le Cœur, Architect

because from the sixteenth to the nineteenth century the architectural conception was similar.

"Forms," he says, "follow fashions ; that which is lasting in a style is a certain way of building, planning, and decorating. Who, to-day, would venture to assert that we could build, plan or decorate exactly as was done a hundred years ago ?

But our climate remains unchanged. Our taste

that of past ages. Early in the nineteenth century architects designed from some pre-existing building (such as the Roman temple, for example) and adapted their planning and construction to this form. Thus we saw a church, the Madeleine, a Chamber of Deputies, or a Bourse all having the same appearance ; but, as each served a different purpose, behind these exteriors was a whole system of vaults, domes,



relieving arches, etc. The construction was in contradiction with the style. What modern architect would proceed on these lines? Given a programme, given the materials which are prescribed, either by the site or by financial considerations, the problem before the architect of to-day is to scheme a harmonious whole in which all the different factors are functions of the building. The solutions of this problem are varied according to the individual predilections of their authors, but the principle remains the same."

I am able to give through the kindness of Monsieur Albert Lévy and the publishers of *L'Architecte* the same tendencies are visible; but in this case the governing factors are generally rapidity in construction and economy in cost.

The most remarkable recent building, which is the logical, if rather strange, result of the factors which have been mentioned, is the church at Raincy, near Paris, designed by MM. Perret, who are past students of the Ecole des Beaux-Arts, and also qualified



EGLISE SAINT-LOUIS À VINCENNES. Intérieur Coté Chœur  
D.oz et Marrast, Architects

This, I think, is a faithful exposition of the point of view of our French colleagues: to them, as indeed to all of us, each architectural composition is a new problem which can only be solved by the careful and logical consideration of each of the many factors, so infinitely varied, of site, materials, cost and purpose.

In France, and more especially in the reconstruction of the devastated provinces, the problem is made more difficult by four additional factors: lack of skilled labour, lack of materials, the need for economical construction, and the need of rapid completion.

This has resulted in a wide use of concrete, both reinforced and in all its other forms, and the new essential factors have influenced planning and design, which shows, as with us, a tendency to the predominance of the vertical line and the elimination of applied ornament.

In Paris, as will be seen from the illustrations which

engineers and specialists in reinforced concrete construction. Here, it must be admitted, we have a work which is primarily engineering, but which suggests many possibilities and also causes one to wonder whether the time will not come when architectural education will be concerned more particularly with construction and less with the study of ancient architecture; when the architect will possibly have to combine the art of architectural composition with the training of a structural engineer.

In the church of Saint-Louis, at Vincennes, the same problem of economical construction, rapid execution and economy of skilled labour has been solved by Monsieur Marrast in a different but very effective and satisfactory manner.

In fact, one is struck, in all the buildings illustrated, by that influence of the constructional problems on the composition which is a salient fact in modern French architecture.

## Benedetto Croce

BY W. E. VERNON CROMPTON [F.]

IT is my intention to discuss one point only in Benedetto Croce's scheme of Aesthetics, but before doing so I think it advisable to try and present the barest outline, a meagre skeleton as it were, of his philosophy.

To a considerable extent this philosophy is concerned with a re-definition of terms in current use. Croce starts with an assumption which is generally recognised as the best if not the only method of approach to any satisfactory system of philosophy, namely, that there cannot be any reality without mind. That mind in action is reality. There are two forms of this activity: one theoretical, the other practical; one concerned with knowing, the other with doing.

Neglecting the latter for the time being, let us consider for a moment what is involved in the most ordinary process of knowing or thinking. It is a natural prejudice to imagine that the first thing we do when we commence to think is to compare, to classify, to bring the subject-matter newly born into our consciousness into some relation to our previous experience and thus to acquire knowledge primarily by the use of logic. Croce, however, does not agree with this very natural prejudice. He contends that before the logical faculty does or even can become active, it is necessary for the intuitive imagination to give form to what has hitherto been mere formless impression.

As so much hangs upon the use of the words intuitive and intuition in Croce's philosophy of Aesthetics, before proceeding further let us consider what these words mean. In regard to this I think it will assist us if we refer to another philosopher, a Frenchman, whose point of view is in many respects similar to that of the Italian. Bergson suggests that consciousness has a double form, being split up into intuition and intelligence which represent complimentary or perhaps opposing tendencies in conscious activity. To use a metaphor of Bergson's—consciousness may be regarded as a vague nebulousity which has condensed at its centre into intellect. Now intellect by the methods of science delivers up to us the secrets of physical operations, and in doing so it takes an outside view of life of which it gives us plans, sections and elevations as it were. To continue the use of the metaphor, the fringe surrounding the bright nucleus of intellect also has its value in life: this fringe of intuition referred to by Bergson as a kind of developed instinct leads directly into the significance of life itself and often enables us to grasp what the intellect fails to give us. However fugitive, vacillating and imperfect is our intuition, we *live* our intuitive

experiences: however definite, steady and complete is our intellect we merely *think* our intellectual experiences. Intuition is a primitive mode of knowledge from which intelligence is derived by adaptation. The progress of thought is therefore a passage from intuition to intellect, the reverse being neither natural nor possible.

The theoretical activity like the practical activity also splits itself into two, namely, the economic activity and the ethical activity.

Thus Croce's system of philosophy presents itself under four distinct aspects arranged in pairs, the first pair giving a knowledge of individual images and a knowledge of universal relations through the intuition and the intellect respectively. The second pair is concerned with individual ends and universal ends through the economic and ethical activities respectively. These four stand in definite relation, they are not interchangeable: they include the whole of reality.

Four distinct concepts are connected therewith one to each of the four: beauty with its concrete form of art; truth with its concrete form of history; utility and goodness with their concrete forms of economic and moral conduct. There is not a science of beauty and a science of ugliness, but there is one philosophical science of aesthetics: similarly as regards truth and error, worth and worthlessness, good and evil.

We are now, I hope, in a better position than we were at the outset to consider more exactly Croce's theory of Aesthetics.

As a method of approach to this portion of the subject, let me quote a few lines of poetry which I hope may be unfamiliar and thus not connected in the mind with any preconceived associations and ideas.

"Then saw I a wan face,  
Not pined by human sorrows, but bright-blanch'd  
By an immortal sickness which kills not;  
It works a constant change, which happy death  
Can put no end to; deathwards progressing  
To no death was that visage; it had past  
The lily and the snow; and beyond these  
I must not think now."

Now my first impression on reading these lines—and I venture to think it will be yours also—is of a image in the mind spontaneously created. This is the first cognitive step taken by the intuition in its simplicity and is experienced as something lived rather than represented. No question of reality or unreality arises in connection with this pure image, it is merely formed by the mind in entire detachment from all intellectual categories, concepts or other logical pro-



cesses: in other words there is no thought in our mind of comparison or classification with or relation to our intellectual life at the fugitive moment of the creation of the image. It is pure intuition and is a piece of intuitive knowledge as opposed to logical knowledge. Further in criticising our initial response to these lines of Keats we realise that the image does not stand alone but is linked up with feeling, doubtless passionate feeling, in the case of the poet.

It is this synthesis of feeling and image in our intuition to which Croce gave the name of æsthetic, and of which he says: "Feeling without image is blind, and image without feeling is void."

This move away from the commonly accepted definition of æsthetics is significant of Croce's philosophy. In everyday speech the word æsthetic is used invariably to describe those qualities of things, those aspects of nature and art which give us pleasure on account of their beauty. For Croce such a definition contains a confusion in thought of the theoretical and the practical and is disorderly mental conduct not to be thought of in any consistent philosophic scheme.

It is perhaps necessary to guard against a misapprehension that may arise owing to the use by Croce of words in a sense not generally accepted. In the ordinary course of things, when we speak of works of art we refer to such concrete things as paintings, sculpture, music and, in moments of enthusiasm, even to works of architecture, and there arises in our mind some image of an external physical object. Croce in re-defining his terms denies emphatically that such physical objects are art. Art to him is purely mental and is concerned with spiritual meanings; the work of art is the internal expression of the image, or as Croce himself says—"Art is perfectly defined when simply defined as intuition." The artist, however, as man being practical as well as theoretical, *i.e.*, contemplative, takes measures so that his art should not be lost. He therefore engages in practical arts such as musical composition and designing, which are the æsthetic activities as commonly understood, so that he may be able to convey to others his own phantasm, so that others by turning their gaze upon the point that the artist has indicated may reproduce that image in themselves and likewise become artists.

This physical reproduction of the image by the artist is a practical act guided by knowledge, and therefore does not belong to the æsthetic activity but to the economic activity, and is called technique. Says Benedetto Croce: "So distinct among themselves are the two forms of activity that it is possible to be a great artist with a bad technique; a poet who corrects the proofs of his verses badly; an architect who makes use of unsuitable material or does not attend to statics; a painter who uses colours that deteriorate rapidly. But what is impossible is to be a great poet who writes

verses badly; a great painter who does not give tone to his colours; a great composer who does not harmonise his notes; in short a great artist who cannot express himself."

I now come to the single point of detail that I wish to discuss:—

We have seen that the æsthetic activity has a place in Croce's philosophy important and autonomous, distinct from the intellectual and practical activities.

He is most emphatic upon the point; to quote again from the *Essence of Æsthetic*—"The last and perhaps the most important of *all* the general negations that it suits me to recall in relation to this matter; with the definition of art as intuition we deny that it has the character of conceptual knowledge."

This means that such concepts as truth, goodness, fitness, use, order, economy, and even workmanship and scholarship, are really independent of æsthetics; such ideas neither form part of æsthetic quality nor can be considered as ideal values by which the æsthetic activity can be criticised, for they belong to the other categories of logic, economics and ethics.

Hence, as Geoffrey Scott has pointed out in his *Architecture of Humanism*, it is illogical to say that architectural standards must be fixed precisely by structural laws; that architecture will be beautiful when construction is most truthfully displayed; it is illogical to hold, as I believe Professor Lethaby does as regards the arts and crafts, that if a thing make itself logically out of its conditions it is necessarily beautiful; or that their æsthetic value consists in a just co-ordination of various workmanships. The typical Ruskinian criticism that "certain right states of temper and moral feeling were the magic powers by which all good architecture without exception had been produced" loses its weight with the elimination of the moral concept from æsthetics.

All such intellectual and practical pseudo-æsthetic is ejected from Croce's philosophic system, and with it the difficulty or even the necessity for explaining why Charing Cross Railway Bridge wherein construction is most truthfully displayed has, after all, no value as æsthetic expression.

Although, for the purpose of clear thinking the character of æsthetics must necessarily be considered as autonomous, yet in practical life the various categories often associated therewith are found to overlap in experience. The imagination is rarely free from admixture of intellectual and practical elements; unconsciously and automatically they intermingle with the intuition.

This has played havoc with the critics and other amiable persons who write. It is quite common in the current criticism of the drama, of music, of poetry and of design, to find certain criteria employed whereby so called æsthetic criticisms, are made which have

nothing to do with æsthetics. For instance, the pictures of the late Mr. Marcus Stone make an appeal because of the story they tell; Westminster Abbey makes its appeal because of its historic associations; a Parsons' turbine engine makes the appeal of inevitable efficiency; Morris tapestries from Burne Jones cartoons appeal because they remind us of:

"Charmed magic casements opening on the foam  
Of perilous seas in færy lands forlorn."

The Gothic revival was to a large extent based upon this type of inexact pseudo-æsthetic and that is possibly why we often find the surviving Neo Goths so impatient with Benedetto Croce.

## English Brickwork<sup>\*</sup>

BY SYDNEY D. KITSON [F.].

Sir Edwin Lutyens, in a short introduction to Mr. Nathaniel Lloyd's book on brickwork, speaks of the subject as "a great English tradition." The volume is worthy of the tradition. The author is methodical and practical, and, in his one hundred pages of letterpress, he has brought together an enormous number of facts, historical and technical, each of which is of some value to the student in forming a real knowledge of the material and its application. Mr. Lloyd's enthusiasm for bricks and for all their collateral relations is patent throughout, and it peeps out even from the carefully compiled lists of the wages, prices and sizes which were current in different ages.

In the historical chapter, the statement reappears that the bricks of St. Alban's Cathedral were reused from the City of Verulamium. But would there have been a sufficient number available from the eight hundred year-old ruins, and would not the task of separating these bricks from their surrounding mortar have been an insuperable one? It seems more reasonable to suppose that the Normans used the Roman models, and burnt fresh bricks for the new building. Mr. John Bilson's researches into the history of the fourteenth-century brick buildings of Beverley and Hull are duly recorded; as is also the influence of the Hanseatic League on the eastern seaboard of England in mediæval times. The Hundred Years' War with France familiarised the English building owner with the brick castles of France, and it was from France that the so-called "English bond" was derived to take the place of the older English methods of irregular bond. The vogue of the diaper-patterned brickwork, formed by flared headers of dark colour and partially vitrified, came also from across the Channel.

Bearing in mind the quantity and variety of English brickwork in Elizabethan and Jacobean times, when the material was so fashionable as to induce builders in a stone country to put an outer skin of brickwork to stone walls, it is no wonder that an Act for the rebuilding of London in 1667, describes brick as "comely and durable."

And, turning over the illustrations of this book, one feels that the appeal of English brickwork at its best lies in the Wren period. Such examples as the Middle Temple Gateway, the now demolished front of Christ's Hospital or the Orangery at Kensington Palace show the co-ordination of designer and craftsman in the happiest possible way.

Mr. Lloyd considers the brickwork revival of the late nineteenth century to have been a failure, owing to the inability of the architect to understand the material and to the extinction of intelligent craftsmen, whose achievements in earlier work were the fruit of long and intimate experience. Surely this judgment is not altogether deserved. There are numbers of examples of good and understanding brickwork design of the late nineteenth century in London alone. The trouble was that the architect was frightened of his public, and when using "common brickwork" he felt it necessary to apologise for his material by over elaboration. Such broad, simple, and at the same time scholarly handling of brickwork as has been done of late years in Birmingham, for example, would not have been considered "gentile" thirty years ago.

Brickwork is likely to hold its own for all ordinary building work for many years to come. Such examples of naked concrete building as that shown in "The Times" a short while ago, to illustrate an article on "The New Architecture," are entirely unconvincing. Mr. Lloyd enforces once more the old truth that "success in handling building material has ever depended upon intimate knowledge of its capacities and limitations. Of no material is this truer than of brick, and the materpieces of brickwork owe as much to the craftsman as to the designer."

In addition to the letterpress there are nearly 300 full-page illustrations from photographs. These are arranged in chronological order. It is claimed that every important type is represented by at least one example. The photographs are of particular value in that they are, in almost every case, taken by the author himself. While the illustrations are frequently picturesque—how could the result be otherwise with such subjects as East

<sup>\*</sup> *A History of English Brickwork.* By Nathaniel Lloyd, O.B.E. Quarto. London: H. Greville Montgomery, 43 Essex Street, Strand. 1925.





KENT, BROOME PARK. N.E. ANGLE. The E. porch and N. doorway are modern, otherwise there is little alteration.



SUFFOLK, BURY ST. EDMUNDS. UNITARIAN CHAPEL, d. 1711.





KENT, LARKFIELD, BRADBOURNE, 1714.—Angle view of W. front.





ESSEX, SANDON.—St. Andrew's Church Porch. c.1502



Barsham Manor House or Moyns Park? Each view is taken with the leading purpose of illustrating the brickwork to the best advantage. In nearly every instance the light has been so carefully chosen and the definition is such that the whole building process can be seen. There is one wilful exception. At Royden Hall, East Peckham, a sixteenth-century manor house, the gables and chimneys have been rebuilt in so mechanical a manner as to destroy the brickwork character. Here Mr. Lloyd has waited until the sun was behind his subject, when he has produced a charming silhouette. The examples range from the eleventh-century castle at Colchester to a building which was in course of erection a year ago at Sheffield, where the bricklayer is seen laying 800 bricks in an hour. The forty sheets of measured drawings, to

a large scale, include Cromwell House, Highgate, Willmer House, Farnham, and No. 11, Took's Court, in the City. The drawings of Miss Dorothy Buckmaster are particularly good, and more especially her sheets of diaper pattern.

This volume is likely to remain as the standard textbook on English brickwork. Taking into consideration the conciseness of its information, the appropriateness of its photographs and the excellence of its measured drawings—and the cost of modern book production—its price is a reasonable one. It is just such a book as would be frequently consulted in an architect's office, and it should have a place in the library of every architectural school and technical college.

## Reviews

### A SHORT HISTORY OF THE BUILDING CRAFTS.

By Martin S. Briggs, F.R.I.B.A., Oxford. At the Clarendon Press. Price 8s. 6d. net.

"The twofold object of this book," . . . writes Mr. Martin S. Briggs, in his Preface . . . "is to serve on the one hand as a companion to existing text-books of architectural history and of building construction, thus enabling a student of architecture to realise more clearly the close, but often forgotten, relation between the two; on the other hand, to remind the various branches of building craftsmen of the position of their ancestors in architectural history, and to tell something of bygone methods of work." . . . It may be said at once that he successfully achieves his purpose. At the very outset he refers to the difficulty of making the man in the street interested in building, but that worthy need have no fear of being baffled by obtruse technicalities in these pages.

The first chapter, on "The Architect, The Craftsman, and the Past," should allay any such misgivings and encourage the reader to go on and enjoy the ten successive chapters on the chief building "trades" or crafts.

Interesting facts emerge as the result of the author's wide and diligent research. For instance, it makes one envious, in these hectic times, to be reminded that Vitruvius laid it down that bricks should be made *at least two years before using*, and elsewhere that the price per thousand in London in 1479 was 4s. 7d. and even as low as 3s. in 1568.

Then again, from Batty Langley's "A Sure Guide for Builders," published in 1729, it is amusing, after noting the exact thicknesses of "Front and Rear Walls" of lesser mortals' houses, to read that . . . "houses of the fourth rate of building, being chiefly for Noblemen, etc., have their thickness left to the discretion of the Architect." . . .

The examples given, in the chapter on "Masonry," of bad building and scamping by the old Gothic builders go to prove that even they were not all paragons.

It seems that Lescot is the real inventor of the "manard" roof, for he anticipated by a long time the type of roof always attributed to François Mansart (1598-1666) or his more famous nephew Jules.

It is worthy of note also that Joseph Moxon, in his "Mechanik Exercises, or the Doctrine of Handy-works,"—which began to appear serially in monthly parts in 1678—records that the principal rafters of roofs always tapered from plate to ridge, a practice now quite abandoned, but apart from suchlike minor exceptions, as Mr. Briggs points out, . . . "the carpenter's tools, his materials, his joints, and his whole theory of work, have altered surprisingly little for centuries. We now use methods of framing woodwork that were in vogue three thousand years ago in Egypt. There is hardly anything in a modern book on carpentry that is less than a century old," . . . and he goes on to express the opinion that even . . . "a hundred years hence there is not likely to be much further development." . . .

But what, one wonders, was the precise function of an "Inblower." All we are told is that he seems to have been a joiner of sorts in medieval days. Possibly the name may still survive somewhere.

That the Romans "grained" cheap wood to represent something better comes as rather a revelation.

The partiality of the Egyptians for very small panels is explained by the tendency for wood to shrink in the powerful sun of their country.

Panelling in England appears to have been introduced in the thirteenth century and . . . "is said to be due to Henry III, who ordered a chamber at Windsor to be panelled with Norway pine, specially imported." . . . Only two days were allowed for fixing, so "rush jobs" are not entirely a product of our time. It is strange to know that the honour of first being turned into panelling does not belong to our native oak.

The excellent chapter on ironwork emphasises how utterly *démodé* at the present time are Ruskin's strictures against steel construction.

The development of ironwork is in itself a fascinating study. With regard to wrought ironwork, one does not usually associate the famous Tijou with anything other than beautiful and intricate ornament, yet he it was who made the iron window frames of St. Paul's Cathedral. It is a sobering reflection that so distinguished a designer should have died in obscurity in Paris.

Mr. Briggs has a very engaging way of summing up the evidence at the end of each chapter. His conclusions

on the subject of ironwork are best given in his own words, which are worth quoting. He says that . . . "During the seventy years that have elapsed since that date (i.e., 1851, the year of the Great Exhibition) the development of iron and then of steel construction has proceeded apace, but the proper treatment of the material in design is still perhaps the most difficult problem in modern architecture. The architect lives with one eye on the past, and, in this case at least, the past affords him no very obvious inspiration. He is still groping among the great marble columns of the Parthenon for light on modern commercial buildings. But if he regard the spirit rather than the letter of the past, he will see that the ancients were always modern. The village blacksmith laboured to keep out the savage Danes by strengthening the church door, and centuries later he introduced dog-bars to keep out the dogs. Yet in doing so he never ceased to be an artist. He designed the most beautiful ironwork in all art-history in the first half of the eighteenth century, when he had no copybooks, and it was not until the Architect came with his Vitruvius under his arm that all life and originality vanished from his work." . . . As with ironwork, so with plasterwork, for . . . "it was not until the early years of the eighteenth century that plastering ceased to be a traditional craft. Then it became more and more a matter of working from 'the antique' and guilloches and modillions were turned out by the mile" . . . (as they are to-day!) In this section the Guildhall at Thaxted, Essex (inadvertently indexed, by the way, as Thetford), has been chosen as one of the illustrations of East Anglian "pargetting" but in this particular example the plaster skin has all been stripped off, alas in quite recent times, by "too-clever-by-half" restorers for the sake of exposing the timber "bones" of the building.

It may not be generally known that . . . "The English word 'sash' is derived from the French *chassis* (frame), and Moxon, at the end of the seventeenth century, spells it as 'shas'." . . .

The author is able to conclude his series of studies on a happier note, at any rate so far as the revival of stained glass is concerned, though the French, who first introduced the rolling of large plates in 1688, have much to answer for.

The demand for "reproductions from the antique," has had in the more recent past a baneful effect on architectural development, but subject to several "ifs" the author thinks that . . . "building may become, as it was long ago, the visible expression of the needs of a cultured people." . . .

The late Mr. C. F. Innocent's admirable book on "The Development of English Building Construction"—published by the Cambridge University Press in 1916—is one of those to which reference is made. That and the one under review, taken together—the products of Cambridge and Oxford respectively—might almost be said to supply the vitamins in the architect's educational diet.

Mr. Briggs, with the ability we have now grown to expect of him, has written a most useful and readable book, illustrated by 259 clear, though small, drawings, especially made (with only six exceptions) by his own hand.

It deserves the warmest welcome.

BASIL OLIVER [F.]

#### REPORT OF THE BIRMINGHAM CIVIC SOCIETY

Birmingham is fortunate in possessing a Civic Society whose aim, as the report of last year's work states, is "to keep in mind the ideal of a regenerate city." It is fortunate in the membership of the Society, which includes, so one gathers from the list its chief citizens, among them two Cabinet Ministers and it is very fortunate, one may add, in having as architect of Mr. William Haywood's broad sympathies as its secretary; not only to write its report, but one cannot help thinking largely to direct its energies. These energies are not all directed to architectural objects, even in the widest meaning of that term, though necessarily in regenerating any town born of the industrial revolution, they play the largest part. The Birmingham Civic Society has supported Sir Barry Jackson in his Repertory Theatre—an enterprise which put Birmingham definitely ahead of London in theatrical fare until Sir Barry took London too under his wing. Then the Society has founded a civic medal and awards it annually to the citizen who has done most for his city. Mr. Matthews, conductor of the Birmingham orchestra, and Sir Barry Jackson have both received it. The notion occurs to one as one reads this report and sees how the Civic Society through Mr. Haywood has provided ideas for the various departments of the municipality, and particularly that concerned with parks and gardens, that the secretary of the Society, if the rules allow, should soon receive it too. For it is highly remarkable the way in which the Society has not only been able to put its own ideas forward, but through the confidence it has established has carried them to fruition. Any one who has tried to advise a municipality from the outside knows how touchy municipal officials generally are at any advice offered to them. Here in Birmingham an outside body appears to be working in greater amity with the corporation, a fact which says a great deal for the tact and character of both. As often is not the Corporation appears on its own initiative to seek the advice of the Society. In this way the Society was able to prevent the building of a big memorial monument on Lickey Hills, which, in my opinion, would have been an undesirable encroachment on the primitive conditions of the hills. In the same way it has been able to offer positive suggestions for plans for the gardens of Aston Hall, which have been carried out. In the latter case it has even gone so far as to provide out of its own funds a certain amount of walling and steps. All this shows that, although only five years old, the Birmingham Civic Society is a great force for good in that city. Birmingham has always had the reputation of leading the way in municipal government. With the Civic Society behind the Corporation it is likely greatly to extend that lead.

C. H. REILLY [F.].



PRELUDE TO ARCHITECTURE: *By William Godfrey Newton. The Architectural Press: 3s. 6d.*

A book by a good architect on his own subject is welcome, especially when it is delightfully written. The author tells us that this is an attempt to lay bare the bases of criticism and to remove from them a superfluous lumber. I cannot say that after reading his nine essays I was quite clear as to what the bases of criticism on architecture really were; but, like Mr. Godfrey Scott, Mr. Newton continues to clear the ground of misconceptions and confusions of thought. In that he goes a little further than *The Architecture of Mannerism*, and offers us some crumbs of positive doctrine. For instance, his explanation of the difference between expression of structure and mere relation of construction is admirable; and his suggestion that certain parts of Gothic buildings, like the west front of Peterborough, are just as much "arranged" and just as little "organic" as the façades of Renaissance palaces encourages one to hope that architecture flourished in the Middle Ages as well as in the baroque period. I think, however, there would be greater value in philosophical writing on our subject if we could agree as to what architecture really is when we talk about it. Mr. Newton says the stepped piers of Chartres are architecture. He connects this also with the handling of a material problem, so that the emotional side of man is content with the technical solution. Is it therefore concrete structure or is it the roof of Hagia Sophia or the wing what to do when a client bursts into tears? Apart from that, this book gave me great pleasure in the note of subdued enthusiasm which it conveys. The author is excellently English, and puts his own achievements—even American—in their place in relation to ours. That is encouraging. I recommend this little book—a kind of meditation on our work—to the whole profession. The forty minutes which it takes to read would not be wasted even by architects of established eminence.

A. S. G. BUTLER [F].

EVERYDAY LIFE IN ROMAN BRITAIN: *By M. & C. H. B. Quennell. B. T. Batsford, Ltd.: 5s. net.*

It is impossible to speak too highly of this book, the first of the "Everyday Life Series," written by the Quennells. In it they have succeeded in dealing adequately and simply with a wide and complicated subject.

It only consists of 108 pages, but they are crammed with interest and information. It is a book that illustrates life in Roman Britain in a way comparable to that given by Mr. Kipling in *A Centurion of the Ninth* and *On the Great Wall*, to both of which it will

serve as a delightful supplement. In fact, by reading them together a better idea of Roman Britain will be obtained than by wading through many ponderous archaeological volumes.

It is refreshing to find authors who are not unbalanced by their weight of learning, and who are evidently much more concerned to impart the information they possess in a direct and simple manner for the benefit of their readers, than to create by their writing a monument to their own erudition.

The sense of balance is well maintained throughout the book. Architecture does not occupy too great a proportion of the space, but its relation to the life of the people is admirably shown. The fact that the authors are themselves capable of supplementing their verbal descriptions by drawings and diagrams saves long-winded descriptions, besides making the point at issue absolutely clear.

A good word is said for the soldiers, pointing out that, then as now, they were really very useful members of society and were able to do much useful civic work in addition to their military duties. They show clearly the high level of civilisation and organisation, based on the military occupation of Britain, and how this civilisation and organisation fell into chaos when that military occupation ceased.

The extraordinary modernity and efficiency of Roman methods are well expressed, and one cannot refrain from quoting Kipling's "The Truthful Song":

The Bricklayer:

"I tell this tale, which is strictly true,  
Just by way of convincing you  
How very little, since things were made,  
Things have altered in the building trade."

After praising this work so highly it seems almost wrong to speak of a small detail, but on page 44 attention is called to the fact that the presence of clay on the floors at Silchester is evidence of a timber framed upper storey. One would rather think that it may be part of the original construction of the upper floors, as to this day such floors are constructed in the Balkans by beating clay and earth on to a layer of small branches and brushwood, supported by wooden joists or poles.

As one expects from Mr. Batsford, the book is admirably produced. It is remarkable that such a fine volume can be placed on the market in these post-war days for the small sum of 5s., and most of those who purchase it will not only add to their knowledge, but secure several hours of pure pleasure.

WILLIAM T. BENSLYN [A].

FRANCESCO BORROMINI: *By Eberhard Hempel. Anton Schroll & Co., Vienna: £2.*

"This man," wrote Mr. William Anderson of Borromini, "who of all the bad architects which the times produced, was the most illogical, contemptuous of tradition, and impudent."

Most of us have been content to leave it at that, and,

like his contemporaries, the French students at the newly founded French Academy at Rome, obediently turn away our faces when we near any example of his work.

The French students turned back to a past generation for the rules of architecture, the measured and Roman serenity of Vignola and Palladio; but the architects of Germany and Austria were more sympathetic to the Lombards, with their revolt from static serenity, their demand for rhythm, movement, chiaroscuro, almost Gothic fretfulness. The tradition of the Baroque architects gained its most magnificent vindication in the great monasteries of Bavaria and Austria, and it is from Austria there comes now this most admirable monograph on the life and art of Francesco Borromini.

It traces his life from his birth in 1599 among the lights and shadows of Lake Como, his training as a mason in Milan, and then that long apprenticeship to practical architecture on the works of the nave of St. Peter's, which gave him that almost too consummate knowledge of masonry, and made stone in his hands as pliable as modelling clay. Then his start as an independent architect, comparatively late in life, not as the brilliant improviser, the reckless antagonist of rules, but the deliberate artist, wholly immersed in his work, making drawing after drawing, developing constantly from the plain rather bare beginning, to the rich rhythmic development of some of his more complicated plans. Perhaps the most valuable things in the book are the reproductions of Borromini's sketches; for instance, the drawings of three stages of the elliptical plan of S. Carlo alle Quattro Fontane, or the lissom outlines of mouldings given in fig. 10. These not only show the pencil as almost for the first time, the easiest medium for the first definition of the architect's thoughts, but show Borromini as an artist struggling for a new power of expression, for a new orientation of design.

It is perhaps this struggle for a plastic expression in architecture that gives Borromini's personality a peculiar appeal to-day, and whatever the extravagancies of its spiral top, it is difficult to look at the interacting curves of the courtyard and dome of S. Ivo della Sapienza, shown in plate 70, without a glow of satisfaction at something most delicately balanced.

The end was in darkness and tragedy. Whatever modern writers may say of the terrible crowd of imitators, the close of Borromini's life was clouded by the feeling that he was leaving no school, that all his passionate struggle for a free expression in design was thrown away. Sickness added to the despondency, and, at the end of a long night of fevered despair, he stabbed himself. He lived till next evening, long enough to obtain absolution, and at his own request was buried in the tomb of that other brilliant architect of the Baroque period, Carlo Maderna, in the church of S. Giovanni dei Fiorentini.

H. C. HUGHES [A.].

## Library Notes

MODERN FARM BUILDINGS. By Alfred Hopkins. A.A.I.A. 4to. New York, 1920. £1 4s. (Robert M. McBride and Co., New York.)

This is an interesting work by an American Architect, who has specialised in farm buildings, and the book contains valu-

able suggestions for anyone concerned with the requirements of the farmer. The notes on administration are useful to those who have not had previous experience in this class of work. The agricultural question is one of the most urgent problems before the country, and its settlement should lead to many improvements in our methods and in our buildings.

Mr. Hopkins, by the publication of his book, renders a service to colleagues who have not had the same opportunities of personal experience in a particular branch of the profession, which is likely to become of increasing importance to the practising architect.

J. E. Y.

ENGLISH GARDENS. By H. Avray Tipping. F. Lond. 1925. £3 3s. (Country Life, Ltd.)

This book describes 52 English gardens as they are now, some quite new, some linking on to the past, and so giving a glimpse of Tudor, Stuart and Georgian garden craft. It begins with a brief sketch of the growth of that craft, with reproductions of pictures of gardens from the written books of fifteenth and sixteenth centuries and plans and views from old books, many of which are charming and suggestive. The book is full of illustrations, mostly photographic. of gardens large and small, the former predominate, chosen with the taste and judgment we should expect from the author. Many will be familiar to readers of *Country Life*. It makes a handsome and charming book and one wonders whether any other country could show such a wealth of man-arranged beauty around its houses.

C. S.

CHOIX DE CINQUANTE DESSINS DE MICHEL-ANGELO. £1 1s. 4to. Paris. (Braun & Cie., 1923.)

This book is composed of fifty 9 by 6 photo reproductions of drawings by Michael Angelo, which appear to have been made mostly for his own personal use as first studies in composition for his paintings, frescoes and sculptures.

They show his direct method of drawing from the life, but at the same time adding his vigorous personality to them. Those interested in adding sculpture to their buildings might do well in turning over the pages, as even in these modern days of distorted figures it might be well to note that Michael Angelo never appears to carry distortion beyond the verge of possibility. It also shows how carefully he studied his compositions before commencing a large undertaking. The collection also is useful to those interested in draftsmanship.

The "Head of a Young Girl" (B.M.), page 29, is delicate like a Greek coin, and the "Study of a Hand" (Louvre), page 34, shows directness and speed in work.

A. E. H.

VERS UNE ARCHITECTURE. Le Corbusier. 8vo. Paris. 1924.

This, with its later companion volume, *l'Art Decoratif d'aujourd'hui*, by Le Corbusier, is a brilliant and compelling challenge to the architect of to-day.

They are not so much an attack on the Beaux Arts School (these are lightly dismissed by contrasting a page of student designs with the clear lines of a Farman biplane), nor a insistence on function as the sole factor of design, though beautifully chosen photographs of ships, aeroplanes, motor villas, tenements and studios; rather are they an appeal architects to get back to first principles, simple geometric forms, the essential study of surface, volume, plan. The motor car and the Doric column are shown side by side in an interesting bypath in evolution. But this is only the basis: and the written notes, and the detail photographs, of the work of Phidias and Michaelangelo are a trumpet call to the artist.

H. C. H.



# The Death of Queen Alexandra

On the announcement of the greatly lamented death of H.M. Queen Alexandra on 20th November the following telegram was sent to His Majesty the King at Sandringham House :—

The President, Council and Members of the Royal Institute of British Architects tender to your Majesty their heartfelt sympathy in the loss sustained by the death of Her Majesty Queen Alexandra.

E. GUY DAWBER,  
*President.*

The following reply was received on the same day :

Buckingham Palace.

President R.I.B.A.,

9 Conduit Street, W.

I am commanded to thank you and all who have joined with you in the kind message of sympathy with the King and Queen in their sorrow.

STAMFORDHAM.

24 November 1925.

At the General Meeting on Monday evening THE PRESIDENT, having asked members to rise, said : Since our last meeting in this room the nation has to deplore the loss of Queen Alexandra, and we beg to offer our loyal and respectful sympathy to the King, our Patron, and the members of the Royal Family. Queen Alexandra was beloved by everybody ; her popularity was unbounded, and her influence in the country was very great, and always for good. Her charities were unnumbered, and she will long be remembered, not only for her beauty and charm of character, but also for her good works, benevolence and kindness of heart.

I will ask the Honorary Secretary to read the Address which the Royal Institute is sending to His Majesty the King.

Mr. STANLEY HALL [*Hon. Secretary*] read the Address as follows :

THE HUMBLE AND LOYAL ADDRESS OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS TO HIS MOST GRACIOUS MAJESTY THE KING.

May it please Your Majesty,—

We, your dutiful subjects, the President and Council, on behalf of the members of the Royal Institute of British Architects and of the Societies both in the British Islands and in the Dominions beyond the Seas in alliance therewith, beg leave humbly and respectfully to approach Your Majesty, and to offer our deep and heartfelt sympathy in the irreparable loss Your Majesty, the members of the Royal Family, and the Nation have sustained by the death of your Royal Mother, our late Queen Alexandra, whose gracious personality and ennobling example were of inestimable value to Your people for a period of more than sixty years.

On behalf of the Royal Institute,



E. GUY DAWBER, *President.*

THOMAS R. MILBURN }

ARTHUR KEEN }

BANISTER FLETCHER }

HARRY BARNES }

*Vice-Presidents.*

E. STANLEY HALL, *Hon. Secretary.*

IAN MACALISTER, *Secretary.*

COMMEMORATION OF THE CENTENARY  
OF THE BIRTH OF CHARLES GARNIER.

7 NOVEMBER 1925.

The *Société Centrale des Architectes Français* recently organised a series of fêtes to commemorate the centenary of the birth of one of its distinguished Past Presidents, Charles Garnier.

Invitations were addressed to many distinguished personages in France and also to representatives of the chief architectural societies of the Old and New Worlds.

\*The programme included an official reception at Garnier's best known work, the Paris Opera House, where papers were read by MM. Nénot, President de la Société des Artistes Français, Membre de l'Institut de France; the President of the Société des Gens de Lettres (of which Garnier was a distinguished member); Tournaire, President de la Société Centrale; and the Minister of Public Instruction and Fine Arts. Monsieur Nénot, speaking as a contemporary of Charles Garnier, was able to give many personal reminiscences of his distinguished colleague, and the other speakers, in a series of excellent addresses, brought out many unknown points of considerable interest illustrating Garnier's genius and enormous energy.

During the intervals in the programme the band of the Garde Republicaine gave a musical programme and the three or four hundred members of the public who attended had a unique opportunity of inspecting a series of models, plans and drawings which had been arranged in the foyer and adjacent galleries in the Opera.

The R.I.B.A. was represented by Sir John W. Simpson, K.B.E., past president R.I.B.A., and of the Franco-British Union of Architects, and Lieut.-Colonel H. P. Cart de Lafontaine, Secretary General Franco-British Union of Architects.

In the evening a gala performance of Mozart's "Magic Flute" was given; in the interval between the first and second acts a tribute was paid to the distinguished architect of the Opera when a specially written ode composed by Maurice Rostrand was given by Mlle. Madeleine Roch, of the Comédie Française, and a bust of the architect was crowned with a gilded wreath of laurel, amidst the enthusiastic plaudits of the company.

The whole celebration was remarkable for the enthusiastic way in which it was supported by the general public: it appears doubtful whether, in England, we should see the man in the street spending a considerable sum in tickets for any similar celebration or showing an equal appreciation of architectural genius.

## Correspondence

### THE SELECTION OF STONE FOR BUILDING.

Heriot-Watt College, Edinburgh,  
23 November 1925.

The Editor, JOURNAL, R.I.B.A.,—

DEAR SIR,—May I supplement the report of my lecture at the Royal Academy of Arts by a few additional observations.

I am satisfied that a great deal of useful information can be obtained as to the suitability of a lime stone by

the exposure of samples to acid vapour on the lines which I have followed for some years, and if the Royal Institute of British Architects would care to collect samples of building lime stones I would be quite pleased to carry out a series of acid tests and send them a special report, but I wish to direct their attention to another question, and that is, the selection of suitable bricks to stand modern conditions.

While in London I was asked to visit a building which was erected some 30 years ago a few miles outside London and in which the bricks used are already rapidly decaying, and which on analysis proved to be loaded with sulphate of lime. The selection of suitable bricks to suit modern conditions is as important as a selection of a suitable building stone, and here again I am satisfied that the acid test would prove of practical value. It would therefore be of great interest to add to the experiments on lime stones a set of similar experiments on bricks, especially if it was possible to collect information as to the raw materials used and the methods of manufacture. The old-fashioned London stock brick seems on the whole to stand the London climate wonderfully well, but that evidently is not the case with some of the bricks being used.

May I, in conclusion, direct again the attention of the architects to the suggestion I made as a result of the experiments on the decay of stone, that the hosing of lime stone buildings during hot summer weather would probably prove beneficial. It should surely be possible to select some building in London of lime stone, and arrange for a systematic hosing of certain sections of it, the other sections being left untreated and to take observations from time to time. The hosing should be done in hot weather, and should be repeated on successive days, time to dry out being allowed in between. So rapid is the decay of lime stone buildings in London under modern conditions that I think in three or four years we should be able to collect very definite evidence as to whether hosing was beneficial or not, while the expense of such an experiment would be small.—I am, yours faithfully.

A. P. LAURIE.

### ASSOCIATION OF ARCHITECTS AND SURVEYORS.

21 November 1925.

The Editor, JOURNAL, R.I.B.A.,—

DEAR SIR,—The "recently established Association of Architects and Surveyors" to which I referred in my letter to you of the 19th October, 1925, was *not* the Association of Architects, Surveyors and Technical Assistants. I do not suppose that anyone confused the two bodies, but it may be as well to put the fact on record.—Faithfully yours,

HARRY BARNES,  
Chairman of the R.I.B.A.  
Registration Committee.

### SIR JOHN Y. W. MACALISTER

At the moment of going to press we learn with the greatest regret of the death of Sir John Y. W. MacAlister, F.S.A., the late distinguished Secretary of the Royal Society of Medicine and the father of Mr. Ian MacAlister, the Secretary of the Institute.



# Town-Planning

NOVEMBER 1925

This Memorandum is reprinted with the kind permission of the Surveyors' Institution, by whom it was prepared and published as a supplement to a leaflet issued by them in June 1923.

The Town Planning Act, 1925, which received the Royal Assent in April last, reproduces in consolidated form the law relating to town planning in England and Wales. It did not, however, initiate any new legislation.

The memorandum shows in tabular form the various sections of the repealed Acts and their corresponding sections in the new Act.

*Housing, Town Planning, etc., Act, 1909 (Part II).*      *Town Planning Act, 1925.*

Section 54 (1)	is now	Section 1 (1)
" 54 (4)	"	" 2 (2)
" 54 (5)	"	" 2 (3)
" 54 (6)	"	" 2 (4)
" 54 (7)	"	" 1 (3)
" 55 (1)	"	" 5 (1)
" 55 (2)	"	" 5 (2)
" 55 (3)	"	" 5 (3)
" 56 (1)	"	" 6 (1)
" 56 (2) (a)	"	" 6 (2) (a)
" 56 (2) (b)	"	" 6 (2) (b)
" 56 (2) (c)	"	" 6 (2) (c)
" 57	"	" 7
" 58 (1)	"	" 10 (1)
" 58 (2)	"	" 10 (2) and 10 (2) (a)
" 58 (3)	"	" 10 (3)
" 58 (4)	"	" 10 (4)
" 58 (5)	"	" 10 (5)
" 58 (6)	"	" 10 (6)
" 59 (1) as amended by 2nd Schedule of Housing, etc., Act, 1923	is now	" 11 (1)
" 59 (2)	"	" 11 (2)
" 59 (3)	"	" 11 (3)
" 60 (1)	"	" 8 and 9
" 60 (2)	"	" 8 (5)
" 61	"	" 14 and 15
" 62	"	" 17
" 63	"	" 18 but altered (see post)
" 64	"	" 5 (4)
" 65 (1)	"	" 20 (1)
" 65 (2)	"	" 20 (3)
" 65 (3)	"	" 20 (4)
" 66	"	" 20 (1) and (2)
" 67, which deals with the application of the Act to Scotland, is now incorporated in the Town Planning (Scotland) Act, 1925.		
" 73	is now	Third Schedule, Part 2
" 74	"	Section 19
Fourth Schedule	"	First Schedule
Fifth Schedule	"	Second Schedule

*Housing, Town Planning, etc., Act, 1919.*      *Town Planning Act, 1925.*

Section 42	is now	Section 2 (1)
" 43 (1)	"	" 6 (2) (d)
" 43 (2)	"	" 6 (2) (c)

Section 45	is now	Section 4
" 45 (Proviso)	"	" 10 (2) (b)
" 46	"	" 3
" 47	"	" 13

*Housing (Additional Powers) Act, 1919.*      *Town Planning Act, 1925.*

Section 10 (1)	is now	Section 16 (1)
" 10 (2)	"	" 16 (2)
" 10 (3)	"	" 16 (3)
" 10 (4)	"	" 16 (5)

*Housing Act, 1921.*      *Town Planning Act, 1925.*

Section 6	is now	Section 16 (5)
" 7	"	" 16 (4)

*Housing, etc., Act, 1923.*      *Town Planning Act, 1925.*

Section 18 (Clause 15 of the Bill)	is now	Section 10 (4)
" 19 (Clause 16 of the Bill)	"	" 3 (1)
" 20	"	" 12
" 21	"	" 1 (2)

The following Sections or Sub-sections of the Act of 1925 are reprinted :—

[Section 1 (2) was originally Section 21 of the Housing, etc., Act, 1923.]

*Section 1 (2).*—Where it appears to the Minister of Health (hereinafter referred to as the Minister) that on account of the special architectural, historic or artistic interest attaching to a locality it is expedient that, with a view to preserving the existing character, and to protecting the existing features of the locality, a town planning scheme should be made with respect to any area comprising that locality, the Minister may, notwithstanding that the land or any part thereof is already developed, authorise a town planning scheme to be made with respect to that area, prescribing the space about buildings, or limiting the number of buildings to be erected, or prescribing the height or character of buildings, and, subject as aforesaid, the provisions of this Act shall apply accordingly.

[Section 8 was Section 60 (1) of the Housing, Town Planning, etc., Act, 1909, but modified by more recent legislation.]

*Section 8 (1).*—The responsible authority may, for the purpose of a town planning scheme, purchase any land comprised in such scheme by agreement or be authorised to purchase any such land compulsorily in manner hereinafter provided.

(2) Land may be purchased by agreement for the purposes aforesaid in like manner as if those purposes were purposes of the Public Health Act, 1875, and Sections 175-178 of that Act so far as they relate to purchase of land by agreement shall apply accordingly, and shall for the purposes of this Act extend to London as if the London County Council were a local authority in the same sections mentioned.

(3) The responsible authority may be authorised to purchase land compulsorily for the purposes aforesaid by means of an order submitted to the Minister, and confirmed by him in accordance with Part I. of the Third Schedule to this Act.

(4) The responsible authority may, with the consent of and subject to any conditions imposed by the Minister, acquire by agreement land comprised in a town planning scheme, notwith-

standing that the land is not immediately required for the purposes of the scheme.

(6) The powers of acquiring land under this section shall be subject to the restrictions contained in Part II. of the said Schedule.

*Section 9 (1).*—Any purchase money or compensation payable in pursuance of this Act by a responsible or other local authority in respect of any land or interest of another local authority which would, but for this section, be paid into court in manner provided by the Lands Clauses Acts, may, if the Minister consents, instead of being paid into court, be paid and applied as the Minister may determine.

(2) Any such decision of the Minister as to the payment and application of any such purchase money or compensation shall be final and conclusive.

*Section 10 (2), Proviso (c).*—After any enactment providing for the registration of local land charges comes into force, this provision shall not affect a purchaser of the land unless the resolution, if required to be registered under such enactment as a local land charge, has been so registered.

*Section 10 (7).*—For the purposes of this section "purchaser" means any person (including a mortgagee or lessee) who for valuable consideration takes an interest in land.

[Section 12 was originally Section 20 of the Housing, etc., Act 1923.]

*Section 12 (1).*—The responsible authority may, at any time within one month after the date of an award of compensation in respect of property injuriously affected by the making of a town planning scheme, give notice to the owner of that property of their intention to withdraw or modify all or any of the provisions of the scheme which gave rise to the claim for compensation.

(2) Where such notice has been given, the responsible authority shall, within three months from the date of the notice, submit for the Minister's approval a varying scheme carrying into effect such withdrawal or modification as aforesaid, and upon approval by the Minister of the varying scheme, whether with or without modification, and payment by the authority of the owners' costs of and in connection with the arbitration the award of the arbitrator shall be discharged, without prejudice, however, to the right of the owner to make a further claim for compensation in respect of the said scheme as varied.

(3) No award of compensation in respect of property injuriously affected by the making of a town planning scheme shall be enforceable within one month from the date thereof, or, if notice has been given by the authority under the preceding sub-section, pending the Minister's decision on the varying scheme.

[This section was originally Section 20 of the Housing, etc., Act, 1893.]

*Section 15 (1).*—Where the Minister has refused to approve a town planning scheme prepared or adopted by a local authority, except with certain modifications or subject to certain conditions, and the Minister on any representation is satisfied after holding a public local inquiry that the local authority have unreasonably refused to consent to the modifications or conditions so imposed by the Minister, the Minister may order the local authority to consent to the modifications or conditions so imposed.

(2) An order under this section may be enforced by mandamus.

[Section 18 was, in an altered form, Section 63 of the Housing Town Planning, etc., Act, 1909.]

*Section 18 (1).*—For the purposes of the execution of his powers and duties under this Act, the Minister may cause such local inquiries to be held as he may think fit, and the costs incurred in relation to any such local inquiry shall be paid by the authorities and persons concerned in the inquiry, or by such of them and in such proportions as the Minister may direct,

and the Minister may certify the amount of the costs incurred, and any sum so certified and directed by the Minister to be paid by any authority or person shall be a debt to the Crown from such authority or person.

(2) Sections 293-296 and Section 298 of the Public Health Act, 1875, shall apply for the purpose of any order to be made by the Minister or any local inquiry which he may cause to be held in pursuance of this Act.

### THIRD SCHEDULE.

#### PART I.

##### *Provisions as to the Compulsory Acquisition of Land.*

1. Where a local authority propose to purchase land, compulsorily, the local authority may submit to the Minister an order putting in force as respects the land specified in the order the provisions of the Lands Clauses Acts, with respect to the purchase and taking of land otherwise than by agreement.

2. An order under this schedule shall be of no force unless and until it is confirmed by the Minister, and the Minister may confirm the order either without modification or subject to such modifications as he thinks fit, and an order when so confirmed shall, save as otherwise expressly provided by this schedule, become final, and have effect as if enacted in this Act, and the confirmation by the Minister shall be conclusive evidence that the requirements of this Act have been complied with, and that the order has been duly made and is within the powers of this Act.

3. The order shall be in the form prescribed by the Minister and shall contain such provisions as the Minister may prescribe for the purpose of carrying the order into effect and of protecting the local authority and the persons interested in the land, and shall incorporate, subject to the necessary adaptations—

- (a) the Lands Clauses Acts (except section one hundred and twenty-seven of the Lands Clauses Consolidation Act, 1845), as modified by the Acquisition of Land (Assessment of Compensation) Act, 1919; and
- (b) Sections seventy-seven to eighty-five of the Railways Clauses Consolidation Act, 1845.

4. The order shall be published by the local authority in the manner prescribed by the Minister, and such notice shall be given both in the locality in which the land is proposed to be acquired and to the owners, lessees and occupiers of that land as may be prescribed by the Minister.

5. If within such period as may be prescribed by the Minister no objection to the order has been presented to the Minister by a person interested in the land, or, if every such objection has been withdrawn, the Minister shall, without further enquiry, confirm the order, unless he is of opinion that the land is unsuited for the purpose for which it is proposed to be acquired, but, if such an objection has been presented and has not been withdrawn, the Minister shall forthwith cause a public enquiry to be held in the locality in which the land is proposed to be acquired, and the local authority and all persons interested in the land, and such other persons as the person holding the inquiry in his discretion thinks fit to allow, shall be permitted to appear and be heard at the inquiry, and the Minister shall, before confirming the order, duly consider the report of the person by whom a public inquiry is held.

6. In construing for the purposes of this schedule or any order made thereunder, any enactment incorporated with the order, this Act together with the order shall be deemed to be the special Act, and the local authority shall be deemed to be the promoters of the undertaking.

7. Where the land is glebe land or other land belonging to an ecclesiastical benefice, the order shall provide that sums agreed upon or awarded for the purchase of the land, or to be paid by way of compensation for the damage to be sustained by



the owner by reason of severance or other injury affecting the land, shall not be paid as directed by the Lands Clauses Acts, but shall be paid to the Ecclesiastical Commissioners, to be applied by them as money paid to them upon a sale, under the provisions of the Ecclesiastical Leasing Acts of land belonging to a benefice.

8. The reference to Sections seventy-eight to eighty-five of the Railways Clauses Consolidation Act, 1845, shall be construed as a reference to those sections as originally enacted and not as a reference to the provisions which by virtue of the Mines (Working Facilities and Support) Act, 1923, are in certain cases to be substituted for those sections.

#### PART II.

##### *Restrictions on Acquisition of Land.*

1. Nothing in this Act shall authorise the acquisition for the purposes of any town planning scheme of any land which is the site of an ancient monument or other object of archæological interest.

2. Nothing in this Act shall authorise the compulsory acquisition of any land which is the property of any local authority or has been acquired by any corporation or company for the purposes of a railway, dock, canal, water or other public undertaking, or which, at the date of the order authorising the compulsory acquisition of the land, forms part of any park, garden, or pleasure ground, or is otherwise required for the amenity or convenience of any house.

[These two paragraphs formed Section 45 of the Housing, Town Planning, etc., Act, 1909.]

#### NATIONAL HEALTH INSURANCE.

*The Architects' and Surveyors' Approved Society.*  
26 Buckingham Gate, London, S.W.1.

##### CONTRIBUTIONS.

The contribution for men is 10d. per week, and for women 9d. per week, 5d. of which is in each case payable by the employer.

##### ORDINARY BENEFITS.

**SICKNESS BENEFIT.**—Men, after 26 contributions have been paid, 9s. weekly; after 104 contributions have been paid, 15s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly; after 104 contributions have been paid, 12s. weekly.

**DISABLEMENT BENEFIT.**—Men and women, 7s. 6d. per week, after 104 contributions have been paid.

**MATERNITY BENEFIT.**—40s. after 42 contributions have been paid.

##### ADDITIONAL BENEFITS.

**SICKNESS BENEFIT.**—Payable at the increased rates of 22s. per week for men, and 19s. for women.

**DISABLEMENT BENEFIT.**—Increased to 11s. per week for both men and women.

**MATERNITY BENEFIT.**—Increased to 54s.

**SPECIAL BENEFITS.**—Grants made to members entitled to "additional benefits" amounting to the full cost of any optical, dental, hospital or convalescent treatment, also for glasses, surgical appliances, artificial teeth, etc. Members may choose their own institutions, nursing homes or practitioners.

Further particulars and forms of application for membership may be obtained from the undersigned.

HERBERT M. ADAMSON,  
Secretary.

#### EXAMINATION FOR THE R.I.B.A. DIPLOMA IN TOWN PLANNING.

Mr. John Malcolm Dossor [F.] has passed the Examination and has been granted an R.I.B.A. Diploma in Town Planning.

#### THE R.I.B.A. (HENRY JARVIS) EX-SERVICE SCHOLARSHIPS.

Immediately after the armistice the R.I.B.A. Council initiated a scheme for assisting ex-Service men who were students of architecture by the grant of scholarships at the leading schools of architecture. The working of this scheme has now been completed and the results can be finally estimated.

The ex-Service scholars have been drawn from no less than 10 Schools of Architecture in England, Scotland, and Wales, 35 students have received financial help in obtaining their professional training, and a total sum of £2,500 has been distributed in this way.

The following table contains full particulars of the working of the scheme:—

School.	1920 £	1921 £	1922 £	1923 £	1924 £	Total No. of Students.	Total £
School of Architecture, Architectural Association .. ..	100	75	75	50	150	7	450
School of Architecture, University of Liverpool .. ..	100	100	75	50	125	6	450
School of Architecture, University of London .. ..	—	100	100	100	75	4	375
School of Architecture, The Victoria University, Manchester .. ..	50	50	50	50	50	3	250
Glasgow School of Architecture .. ..	—	50	50	50	50	3	200
School of Architecture, Edinburgh College of Art .. ..	—	50	50	50	50	4	200
Leeds School of Architecture .. ..	—	50	—	25	50	3	125
Robert Gordon's College, Aberdeen .. ..	—	50	50	50	50	2	200
The Technical College, Cardiff .. ..	50	50	50	50	—	2	200
School of Architecture, University of Cambridge .. ..	—	50	—	—	—	1	50
Total						35	£2,500

IAN MACALISTER,  
Secretary R.I.B.A.

## Obituary

### C. H. SAMSON [F.].

We regret to announce the death of Mr. C. H. Samson, who recently died at Rugby at the age of 88 years.

He was born at Headcorn, Kent, and after being educated at the Sir Eliab Harveist Grammar School, Folkestone, where his father was headmaster, was articled to Mr. J. H. Keeble, architect, of Folkestone. In 1879 he commenced practice on his own account at Taunton, remaining there until 1906, when he went to Rugby, where he lived until the time of his death. He was elected a Fellow of the Institute in 1887.

Mr. Samson did much ecclesiastical work, and carried out the restoration of portions of Dunster Castle, Dunster Church, Cleave Abbey, etc., and built churches at Minehead, Alcombe, and restored Brampton. He also held the office of diocesan surveyor for twenty years to the diocese of Bath and Wells. Whilst at Taunton he won the first prize for the design of a new Town Hall, but this has not yet been built. His work in Rugby included the building of a new chancel at St. Matthew's Church and the remodelling of St. Matthew's Schools.

Mr. Samson illustrated Prebendary Hancock's books on Minehead and Dunster, Prebendary Hock's book on "Porlock" and Maxwell Light's book *Dunster and its Lords*. During the war he made pen and ink sketches, including places near Rugby, which were sold for the benefit of the Red Cross Fund.

## SCIENCE STANDING COMMITTEE.

The Science Standing Committee wish to direct the attention of members to the work being done by the Geological Survey, whose address is the Geological Museum, Jermyn Street, London, S.W.1. There are also offices in Edinburgh, Newcastle-on-Tyne, Whitehaven, Manchester, and York.

It is generally known that the Survey interests itself in the deeper deposits, but it also collects and records information concerning the surface strata.

The country is divided into districts, each in charge of a District Geologist, and anyone wishing to know the nature and arrangement of strata immediately beneath the surface in any part of the country can write to, or call upon, the Director, and if the required information is available it is given at once.

Callers are shown the drift maps of areas for which they are available and the accurately located positions of the borings, together with the details, inferred or ascertained, of the strata beneath.

The collection of information concerning surface formations is, obviously, always going on and the Survey would be grateful for any information which architects can give it concerning strata cut through during the progress of works, particularly if the information is sent in time to enable an officer of the Survey to see for himself the actual section and measure it.

At the same time, fossil or other specimens should be preserved for the inspection of the District Geologist, as this is another branch of investigation which comes within the scope of the work of the Survey. G. N. KENT.

## A.B.S. SCHEME OF INSURANCE.

The A.B.S. specialises in Life Assurance. In Whole Life Assurance the sum assured and bonus are payable at death and the payment of premiums normally continues throughout life. The bonuses which are usually payable with the sum assured may be surrendered for cash, applied to the reduction of future premiums or used to reduce the period over which premiums are payable. The Society is not tied to any insurance office and is prepared to offer and advise upon a wide choice of policies in leading companies. Half the initial commission is returned to the assured in the form of rebate and the other half forms a direct contribution to the Society's funds.

Please address all enquiries to the Secretary, Architects' Benevolent Society, 9 Conduit Street, W.1. Telephone: Mayfair 434.

## Notices

## THE FOURTH GENERAL MEETING.

The Fourth General Meeting (Ordinary) of the session, 1925-26, will be held on Monday, 14 December 1925, at 8 p.m., for the following purposes:—

To read the minutes of the General Meeting (Business) held on 30 November, 1925; formally to admit members attending for the first time since their election or transfer.

To read the following paper: "The Condition of the Building Industry with Especial Regard to the Shortage of Skilled Labour, and the Increased Cost of Work," by Herbert A. Welch [F.].

## SPECIAL GENERAL MEETING.

At the conclusion of the above General Meeting, a Special General Meeting will be held for the following purpose:—

To confirm the following resolution passed by the requisite majority at the General Meeting (Business) held on Monday, 30 November 1925:—

That Byelaw 25 be amended as follows, and that the necessary steps be taken to obtain the sanction of the Privy Council to such amendment of Byelaw 25 as is required to give effect to this resolution.

"25.—Any charge under the preceding Bye-law 24 must be preferred in writing and signed and forwarded to the Secretary, who shall lay it before the . . ." etc., as printed down to ". . . such record and publication."

"During the period of suspension the member shall not be entitled to use the title 'Chartered Architect' or the affix of the class to which he belongs, nor shall he be entitled to the use of the Library, attendance at Institute Meetings or right of voting, and his name shall not be printed in the list of members in the 'Kalendar' during the period of his suspension and he shall return his Diploma for such period. Before any member so suspended is reinstated the Council shall consider any further complaints as to his professional conduct during his period of suspension, and if not deemed satisfactory may decree a further period of suspension or his expulsion, in either case the above procedure of announcement and publication shall again be followed.

"Provided always . . ." etc., to end of Bye-law as printed.

## ELECTION OF MEMBERS.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that, if they wish to take advantage of the election to take place on 29 March, 1926, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than 2 January 1926.

## LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

## R.I.B.A. VISIT TO ST. PAUL'S CATHEDRAL.

By the kind permission of the Dean and Chapter, and the St. Paul's Representative Committee Works Sub-Committee, a visit to St. Paul's Cathedral has been arranged by the Art Standing Committee to take place on Saturday afternoon, 12 December. Mr. Mervyn Macartney F.S.A. [F.], Surveyor to the Dean and Chapter, has kindly promised to conduct the party.

As the number of tickets to be issued for the visit must be limited, members who wish to take part are requested to apply as early as possible to the Secretary R.I.B.A., 9 Conduit Street, London, W.1.



# Competitions

## PROPOSED NEW SCHOOL, GOSPORT.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for Architectural Competitions.

## COMPETITION FOR LARGER OFFICES.

WEST BROMWICH PERMANENT BENEFIT BUILDING SOCIETY

The President of the Royal Institute of British Architects has nominated Mr. W. Alexander Harvey, F.R.I.B.A., as assessor in this competition.

## TOPSHAM PUBLIC HALL COMPETITION.

Premiums of £50, £40 and £30 respectively are offered in the above competition. Assessor, Mr. Walter Cave [F.] Last day for questions, 1 January 1926. Designs to be sent in by 1 April 1926. Conditions may be obtained from the Clerk to the Parish Council, Topsham, by depositing £1 is.

## BIRKENHEAD NEW ART GALLERY COMPETITION.

Proposed new Art Gallery and Museum, Birkenhead. Premiums offered £250, £175 and £100 respectively. Assessor, Sir Robert Lorimer, A.R.A., R.S.A. [F.]. Competition restricted to competitors practising as architects and being resident, or having an office within twenty miles of the Birkenhead Town Hall for the twelve months at least prior to 1 January 1924. Conditions may be obtained from E. W. Tame, Town Clerk, Birkenhead, by depositing £2 2s.

## BLACKPOOL MEMORIAL CLOCK TOWER COMPETITION.

The President of the Royal Institute of British Architects has nominated Mr. E. Bertram Kirby, O.B.E., F.R.I.B.A., as Assessor in this competition.

## GUISBOROUGH PROPOSED NEW HOSPITAL.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for Architectural Competitions.

## INTERNATIONAL COMPETITION.

The Fédération Internationale du Bâtiment et des Travaux Publics are organising an International Competition with a view to promoting and facilitating the construction of houses for the middle classes and intellectual workers. Prizes to the value of 500 dollars, 300 dollars and 200 dollars are being offered by Mr. Willard Reed Messenger, engineer, of New York, for a memorandum, either in English or French, not exceeding 5,000 words, accompanied by sketches. Particulars of the competition have been deposited with the Secretary F.R.I.B.A. and can be obtained on application to him at No. 9 Conduit Street, London, W.

## RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

## LEAGUE OF NATIONS.

COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

## THE NEW INSTITUTE FOR THE BLIND, BUENOS AIRES, ARGENTINE REPUBLIC.

An International Competition has been promoted for the Argentine Institution for the Blind, Buenos Aires, Argentine Republic.

A small number of copies of the conditions have been deposited in the R.I.B.A. Library for the information of British Architects who may desire to compete.

A booklet containing the full text of the conditions with other information (translated from the Spanish) and a plan of the ground on which the Institution is to be erected is available for inspection at the Department of Overseas Trade (Room 42), 35 Old Queen Street, London, S.W.1.

## PROPOSED NEW COLLEGE BUILDINGS, LIVERPOOL COLLEGE.

Proposed new College Buildings to be erected on a site in Queen's Drive, Mossley Hill, Liverpool. Assessor, Sir Giles Gilbert Scott, R.A. Premiums £500, £300 and £200 are offered. Last day for questions, 30 September 1925. Conditions may be obtained by depositing £2 2s. Designs to be sent in not later than 1 January 1926.

## AUSTRALIAN WAR MEMORIAL—CANBERRA.

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon, on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

## PROPOSED BRANCH LIBRARY FOR GABALFA.

Proposed branch library to be built on a site in St. Athan Road, Gabalfa. Assessor, Mr. Sidney K. Greenslade [F.]. Premiums, £75, £50 and £30 are offered. Last day for questions, 7 December 1925. Designs to be sent in not later than 12 noon on 16 January 1926. The competition is limited to properly qualified architects within the City of Cardiff. Conditions may be obtained from Harry Farr, Librarian, Central Library, Cardiff, by depositing £2 2s.

## Members' Column

## CHANGE OF ADDRESS.

CAPTAIN W. C. VON BERG [A.] has changed his address to Plan Guinet, Valescure, St. Raphaël, Var, France.

MR. W. HYNAM, Licentiate, has changed his address to 41 North Side, Clapham Common, S.W.4.

## ACCOMMODATION OFFERED.

YOUNG architect is willing to allow *bona fide* student to work in his small office evenings and week-ends, with use of drawing board, heating, light, and access to small modern library. Westminster district. References.—Apply Box 2491, c/o Secretary, R.I.B.A., 9 Conduit Street, W.1.

ARCHITECT (F.R.I.B.A.) wishes to let off part of his offices in West Central District. Inclusive rent; £60 per annum.—Reply Box 4925, c/o The Secretary, R.I.B.A., 9 Conduit Street, W.1.

## OFFICE REQUIRED.

SMALL private office required. Moderate rent. W.C. District preferred.—Full particulars to Box 1125, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

## ROOMS TO LET.

A Good Home offered to two men Friends, or others, by widow of a former Member. Separate Bedrooms, clean and comfortable. If willing to share room, 37/6 each per week. Good food, Electric Light, Bath-room, and every convenience. A few minutes from Russell Square Tube Station, very central for all parts of London. Excellent references and highly recommended.—Mrs. WATKIN, 42 Jessel House, Judd Street, W.C.1.

ARCHITECT has single room to let in suite of offices at a good address two minutes from Piccadilly Circus. Moderate inclusive rental.—Reply Box 3052, c/o The Secretary, R.I.B.A., 9 Conduit Street, W.1.

## COMMENCEMENT OF PRACTICE.

MR. K. DREW EDWARDS [A.] has commenced practice at 27 Friar Lane, Leicester.

## Minutes III

## SESSION 1925-1926.

At the Third General Meeting (Business) of the Session 1925-26, held on Monday, 30 November 1925, Mr. E. Guy Dawber, F.S.A., President, in the chair. The attendance book was signed by 7 Fellows (including 3 Members of the Council), 6 Associates (including 2 Members of the Council) and 8 Licentiates.

The minutes of the meeting held on 16 November 1925, having been taken as read, were confirmed and signed by the chairman. The President spoke of the loss sustained by the nation in the death of Queen Alexandra. The Hon. Secretary read the Address sent to His Majesty the King by the President and Council on behalf of the members of the R.I.B.A. and of the Allied Societies, and on the President's motion the meeting formally ratified the action of the President and Council.

The Hon. Secretary announced the decease of: ROBERT MAGILL YOUNG, M.A., elected a Fellow of the Royal Institute in 1907. Mr. Young was the immediate Past-President of the Ulster Society of Architects and represented that body on the R.I.B.A. Council during the Session 1924-25.

OLAF NORDHAGEN, Professor of Architecture at the Polytechnic School of Norway and architect to Trondhjem Cathedral; elected an Honorary Corresponding Member in 1924.

And it was resolved that the regrets of the Royal Institute for the loss of these members be recorded in the minutes.

The following members attending for the first time since their election or transfer were formally admitted by the Chairman:—

C. E. BLACKBOURN [L.].  
W. FENN [L.].  
L. A. F. IRELAND [L.].  
H. E. ROWLAND [L.].  
WRAY WHESTON [L.].  
C. E. WORTHINGTON [L.].

The following candidates for membership were elected by show of hands:—

## AS FELLOWS (97).

ABERCROMBIE: PROFESSOR LESLIE PATRICK, M.A., Liverpool [A. 1915].  
BINNIE: MAJOR WILLIAM BRYCE, M.C. [A. 1920], St. Omer France.  
DICKMAN: HENRY ALDERMAN, M.C. [A. 1910], Nottingham.  
DOBIE: WILLIAM GLEN [A. 1892], Liverpool.  
HENNELL: SIDNEY THORN [A. 1910].  
HOBBS: FREDERICK BRICE [A. 1895], Liverpool.  
MCLEAN: ARCHIBALD JOHN [A. 1909], Brighton.  
METCALFE: CECIL BROADBENT [A. 1909], Sleaford.  
POLE: THOMAS ALOYSIUS [A. 1895].  
SUTCLIFFE: FREDERICK [A. 1919].  
TASKER: WILLIAM WATT, M.C. [A. 1909], Newcastle-on-Tyne.  
TURNER: HORACE GEORGE [A. 1910], Hankow, China.  
WOOD: ARTHUR JACKSON [A. 1914], Leicester.  
WOOLLATT: JOHN [A. 1910], Nottingham.

And the following Licentiates who are qualified under Section IV, Clause C (ii) of the Supplemental Charter of 1925:—

ABBOTT: ERNEST HENRY.  
BAKES: JAMES HARPER, Leeds.  
BIRAM: ERNEST FRANK STUART, St. Helens, Lancs.  
BOYD: JOHN WILLIAM, Newcastle-on-Tyne.  
COMPTON: CHARLES EDWARD, Newport, Mon.  
DAVIES: SAMUEL, Frodsham.



FRENCH : SIDNEY, Cambridge.  
 GARDNER : ALEXANDER, Glasgow.  
 GARRETT : THOMAS, Brighton.  
 HEYWOOD : JAMES HERBERT, Oldham.  
 MORRIS : WILLIAM RICKARDS, Reading.  
 NUNNS : WILLIAM RHODES, Saltaire.  
 PARR : THOMAS HENRY NOWELL.  
 RAFFLES : WINTER HARGREAVES.  
 SHARP : WALTER RICHARD, Manchester.  
 SIMPSON : GEORGE, Glasgow.  
 TRIBE : ARTHUR WALTER.  
 WEST : JOHN GEORGE TIMOTHY, Abingdon.  
 WILKINSON : ARTHUR GROSVENOR, St. Omer, France.  
 WINMILL : CHARLES CANNING.

*And the following Licentiates, who have passed the qualifying examination :—*

ADAMS : WILLIAM HENRY.  
 ANDERSON : STANLEY PERFIT, Kingston-on-Thames.  
 BENTLEY : CLAYTON MOFFAT, Whitehaven.  
 BEVERIDGE : DAVID ALSTON, Liverpool.  
 BIRD : ERNEST, Southampton.  
 BLACKBOURN : CHARLES EDWIN.  
 BODDY : PERCY CHARLES.  
 BRETT : CHARLES.  
 BRETT : ERNEST JOHN, Wimborne Minster.  
 BRIDGES : OSWALD ARTHUR, Bognor.  
 BROWNE : F. ANSTEAD, Chester.  
 BURGESS : JULIAN GULSON, Beaconsfield.  
 BURNETT : ERNEST WHITFIELD, Colwyn Bay.  
 CAMERON : EDWIN PERCY.  
 CANNELL : ERNEST WILLIAM.  
 CASTLE : SYDNEY ERNEST.  
 CHERRY : HAROLD GRIFFITH.  
 COTMAN : GRAHAME, Norwich.  
 DAVIS : HAROLD STRATTON, M.C., Gloucester.  
 EVANS : ERNEST HOLLYER.  
 FAIRWEATHER : HUBERT MOORE.  
 FORBES : JAMES, Middlesbrough.  
 HAIGH : BERTRAM HUGH PARKIN.  
 HARPER : LEONARD EWEN, Birmingham.  
 HARRINGTON : LLEWELLYN HARRY.  
 HIDER : ERNEST JAMES WEDLOCK.  
 HILL : JOHN JAMES, Newcastle-on-Tyne.  
 HORSBURGH : WILLIAM PETER, F.S.I., Liverpool.  
 JOHNS : EDWIN THOMAS, Ipswich.  
 JONES : ALBERT HENRY.  
 JONES : FRANCIS EDWARD.  
 LYONS : HENRY JOHN, Dublin.  
 MCINTOSH : DAVID GORDON, Liverpool.  
 MACINTOSH : HUGH, East Croydon.  
 M'LACHLAN : JAMES, Edinburgh.  
 McLAUCHLAN : STEWART, Liverpool.  
 MATHESON : DONALD, Dingwall.  
 MOODEY : ERNEST EDWARD, Broadstairs.  
 MORRISON : JAMES INCH, Edinburgh.  
 MURRAY : JOHN, Luton.  
 NEWBOLD : HARRY BRYANT.  
 NURSE : HARRY, M.C., Leigh, Lancs.  
 PEARCE : JOSEPH PEARCE, Liverpool.  
 PEMBERTON : GUY, Birmingham.  
 POMEROY : ERNEST JAMES, Bolton.  
 POOLE : WILLIAM HAROLD, Maidstone.  
 POULTER : HARRY REGINALD.  
 RAVENSCROFT : FREDERICK ERNEST BRIANT, Reading.  
 RIMMINGTON : FRANK, Liverpool.  
 ROWLAND : HAROLD EVANS.  
 RUTHERFORD : JAMES HERVEY, York.  
 SCATFE : WILLIAM NIXON, Newcastle-on-Tyne.  
 SHANN : FRANK HALLIWELL.  
 SHERVEY : ALBERT EDWARD, Bournemouth.

SIMMONS : CHARLES EVELYN.  
 STODDART : DONALD MCKAY, Glasgow.  
 THORPE : FRED, Oldham.  
 VAUX : FRED, Bridlington.  
 WAGSTAFF : CLARENCE BARNARD, Chesterfield.  
 WEBBER : FRANCIS SIDNEY.  
 WEBSTER : WILLIAM EDMUND NORMAN, Spalding.  
 WEIGHTMAN : FREDERICK NORMAN, M.A., Newcastle-on-Tyne.  
 WEST : ARCHIBALD BULLER, Abingdon.

#### AS ASSOCIATES (62).

AIMER : KENNETH WALTER [Special], Auckland, New Zealand.  
 ALLCORN : WILLIAM JOHN [Final], Tonbridge.  
 ANDREWS : CLAUDE EVERARD ALDINGTON, B.Sc. [Special], Birmingham.  
 ASTBURY : FRANK NICHOLAS, B.Arch. Liverpool] Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Stafford.  
 BAILY : BRUCE WILLIAM SEYMOUR STILES [Special], Cwmbran, Mon.  
 CAMERON : ARTHUR EDWIN [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 CHANNON : GUY DUNSTAN [Special], Malton.  
 CHATTERLEY : ARTHUR OLIVER, B.Arch. Liverpool [Final].  
 CLARK : JAMES CHARLES [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], Aberdeen.  
 COLEMAN : SAMUEL ERNEST [Special], Gordon, New South Wales.  
 CONOLLY : HAROLD [Final], Wakefield.  
 COOPER : JOHN BRIAN [Final], Shanghai.  
 CROSSLEY : FREDERICK HAMER [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Wallasey.  
 CUTBUSH : PATRICK [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Barnet.  
 DEAS : THOMAS VICTOR [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Airdrie.  
 FAHY : CONOR PATRICK [Special].  
 FARQUHAR : LUDOVIC GORDON, F.S.A.Scot [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Bridge of Weir.  
 FORSTER : EDWARD, B.A. [Final].  
 GALE : DERMOT WILLIAM FAUNTLEROY [Special War Examination], Melbourne.  
 GLASHAN : WILLIAM [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], Aberdeen.  
 GREEN : FRANCIS ERNEST [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 GREENIDGE : JOHN THEODORE WATERMAN [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Oxford.  
 GREGOR-GRANT : GARROW [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 HARMAN : RICHARD STRACHAN DE RENZY [Final].

- HUME : BERTRAM STEWART [Final], Buenos Ayres.  
 KHAN : HASAN HAYAT [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 KING : JOHN GOULD [Final].  
 LANDER : FELIX JAMES [Final], St. Albans.  
 LAWRIE : ROBERT SORLEY [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], Aberdeen.  
 LEWIS : DORIS ADENEY [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 LOUW : HENDRIK JACOBUS [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Suider Paarl, South Africa.  
 METCALFE : JOHN ARMSTRONG [Final], Cardiff.  
 MILLER : JOSEPH CHARLES [Final], Glasgow.  
 MINOPRIO : CHARLES ANTHONY [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Gloucester.  
 MOBERLY : SYLVIA GRACE [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 MORRISON : ROBERT HORN [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], Aberdeen.  
 OWEN : JOHN HUGH LLOYD, B.Arch. Liverpool [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Liverpool.  
 PAGE : WILLIAM PALMER [Special], Sydney, N.S.W.  
 PARKER : JOHN HERBERT [Final].  
 PERCIK : WOLF [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 PRICE : WILFRED JOHN BROOKHOUSE [Final], Ilford.  
 READ : GEOFFREY ERNEST [Final].  
 RIX : ALEC DONALD [Final].  
 SENYARD : LEONARD [Special].  
 SHARMA : PURSHOTTAM LAL [Final], Agra, U.P., India.  
 SHAW : CHARLES CECIL, B.Arch. Liverpool [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice].  
 SIMPSON : JAMES ROUNTHWAITE MOORE [Special].  
 SMITH : ERIC STEWARD [Final], Reading.  
 STOKES : HORACE WILLIAM [Final], Birmingham.  
 TAYLER : KENNETH SEAWARD [Final].  
 THEARLE : HERBERT [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Liverpool.  
 THOMPSON : ARNOLD JOHN [Special], Calcutta.  
 TOCHER : WILLIAM [Final], Leeds.  
 TOONE : AUBREY ALFORD GIFFORD [Final], Shanghai.  
 UNWIN : EDWARD [Special].  
 WALKER : ARCHIBALD GRAHAM [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Glasgow.  
 WILSON : PERCY ROY, B.Arch.(McGill) [Passed five years' course at McGill University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], New York City, U.S.A.  
 WINTER : FRANK THOMAS [Special], High Wycombe.
- WOOD : THOMAS RUDDIMAN [Passed six years' course at Robert Gordon's College, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], Roker.  
 WOODGATE : JAMES AUSTEN [Special], Hythe.  
 WRAY : KENNETH FLETCHER [Final], Rotherham.  
 WRIGLEY : FRED HILDRED [Final], Wakefield.
- AS HON. ASSOCIATES (3).  
 BRICE : ARTHUR HALLAM MONTEFIORE, J.P., F.R.G.S. Recorder of Tewkesbury, and of the Middle Temple of the Oxford Circuit; Barrister-at-Law.  
 CAMERON : SIR DAVID YOUNG, R.A., R.S.A., LL.D.  
 SMITH : ARTHUR HAMILTON, M.A., F.S.A., F.B.A., Keeper of Greek and Roman Antiquities in the British Museum; President of the Society for the Promotion of Hellenic Studies; Chairman of the Faculty of Archæology, History and Letters in the British School at Rome.
- AS HONORARY CORRESPONDING MEMBERS (5).  
 CORT Y BOTI : CESAR, Principal, Madrid School of Architecture, Madrid.  
 GIOVANNONI : GUSTAVO, Professor of Architecture in the R. Scuola d'Ingegneria and in the R. Scuola sup. d'Architettura in Rome.  
 KEMAL-AD-DIN : PROFESSOR A., Chief Architect to the Moslem Supreme Council in Palestine, Jerusalem.  
 SCIORTINO : ANTONIO, Professor of Arts, Honorary Director of the British Academy of Arts in Rome.  
 STRZYGOWSKI : DR. JOSEF, Professor of History of Art, Vienna University.
- On the motion of Mr. J. Douglas Scott [A.], Chairman of the Practice Standing Committee, seconded by Mr. Frederick Chatterton [F.], Hon. Secretary of the Practice Standing Committee, it was resolved that Bye-law 25 be amended as follows, and that the necessary steps be taken to obtain the sanction of the Privy Council to such amendment of Bye-law 25 as is required to give effect to this resolution:—  
 "25.—Any charge under the preceding Bye-law 24 must be preferred in writing and signed and forwarded to the Secretary, who shall lay it before the . . ." etc., as printed down to " . . . such record and publication."  
 "During the period of suspension the member shall not be entitled to use the title 'Chartered Architect' or the affiliation of the class to which he belongs, nor shall he be entitled to the use of the Library, attendance at Institute Meetings or right of voting, and his name shall not be printed in the list of members in the 'Kalendar' during the period of his suspension and he shall return his Diploma for such period. Before any member so suspended is reinstated the Council shall consider any further complaints as to his professional conduct during his period of suspension, and if not deemed satisfactory may decree a further period of suspension or his expulsion; in either case the above procedure of announcement and publication shall again be followed."  
 "Provided always . . ." etc., to end of Bye-law as printed.  
 The meeting terminated at 8.15 p.m.
- Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to the method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.
- R.I.B.A. JOURNAL.  
*Dates of Publication.*—1925: 7th, 21st November; 5th, 19th December. 1926: 9th, 23rd January; 6th, 20th February; 6th, 20th March; 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

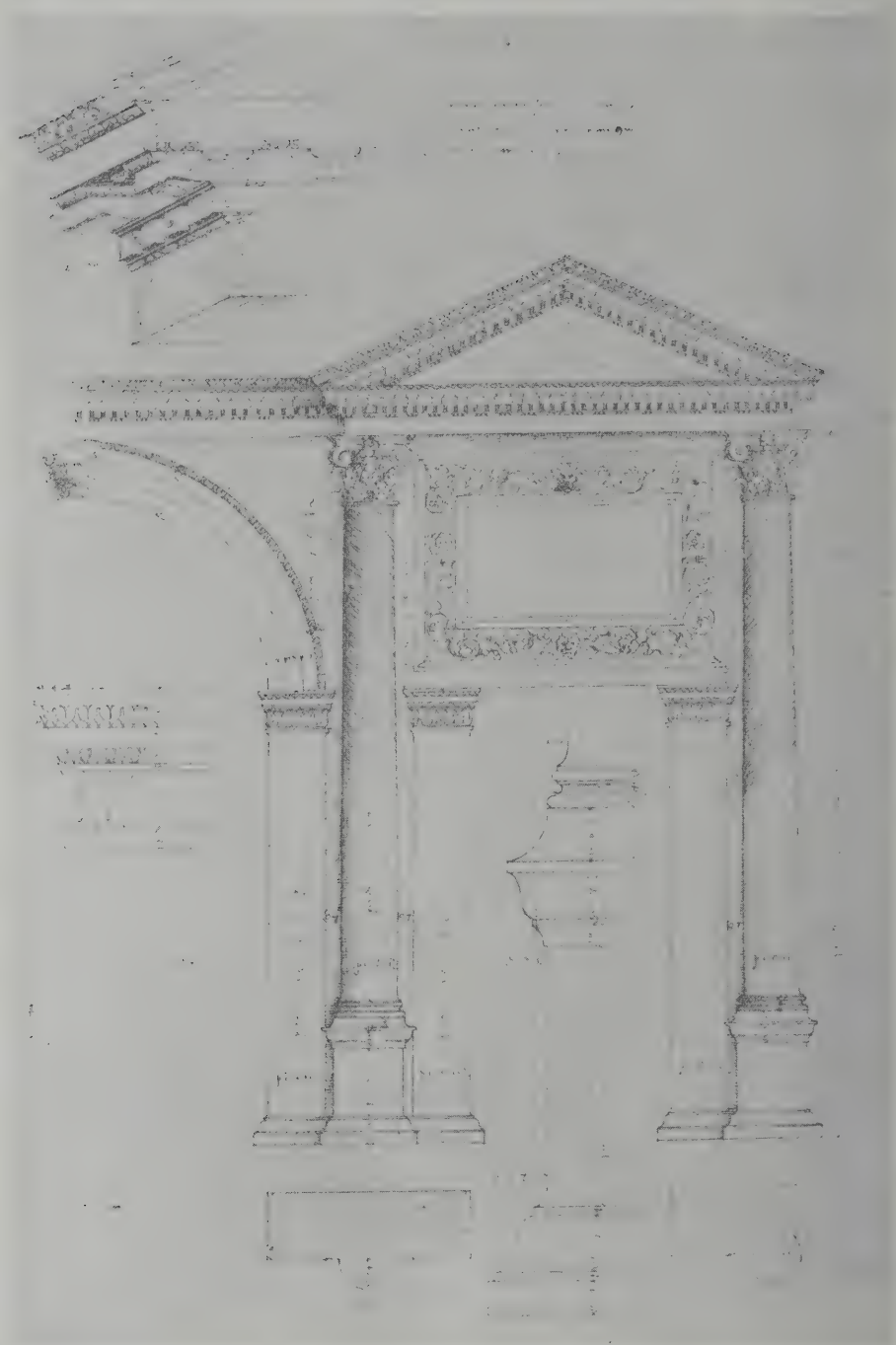
VOL. XXXIII. No. 4

THIRD SERIES

19 DECEMBER 1925

## Contents for 19 December 1925

	Page
INIGO JONES AS A COLLECTOR. By William Grant Keith .. .. .	95
STONE PRESERVATION. By Edward P. Warren .. .. .	109
REVIEWS :	
Architecture. By Ronald P. Jones .. .. .	110
The London Perambulator. By Professor A. E. Richardson .. .. .	111
The Clerks' Well. By W. P. S. .. .. .	112
CORRESPONDENCE :	
The Architecture of Regent Street. By H. S. Goodhart-Rendel .. .. .	112
WATERLOO BRIDGE .. .. .	112
OBITUARY :	
Professor Maxwell Lefroy. By Sir Frank Baines .. .. .	113
Canon H. F. Westlake. By W. R. Lethaby .. .. .	114
Edmund L. Wratten. By Walter H. Godfrey .. .. .	115
Col. Francis S. Leslie .. .. .	115
Lt.-Col. P. G. Fry. By C. F. W. Dening .. .. .	115
PRESIDENTIAL BADGE OF THE WESSEX SOCIETY .. .. .	116
INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS .. .. .	116
VISITS TO BUILDINGS .. .. .	116
ARCHITECTURE UNDER THE NEW STATUTES AT CAMBRIDGE UNIVERSITY.. .. .	116
A.B.S. SCHEME OF INSURANCE .. .. .	116
LEGAL : ATKINSON & LONG v. WELLBROOK SANITARY LAUNDRY CO. By J. Douglas Scott .. .. .	117
BOARD OF ARCHITECTURAL EDUCATION .. .. .	117
NOTICES .. .. .	117
COMPETITIONS .. .. .	118
MEMBERS' COLUMN .. .. .	120
MINUTES .. .. .	120



THE SO-CALLED ARCH OF JUPITER, VERONA  
(Sheet 22, vol. xii, Burlington-Devonshire Collection)

" Inigo Jones as a Collector "



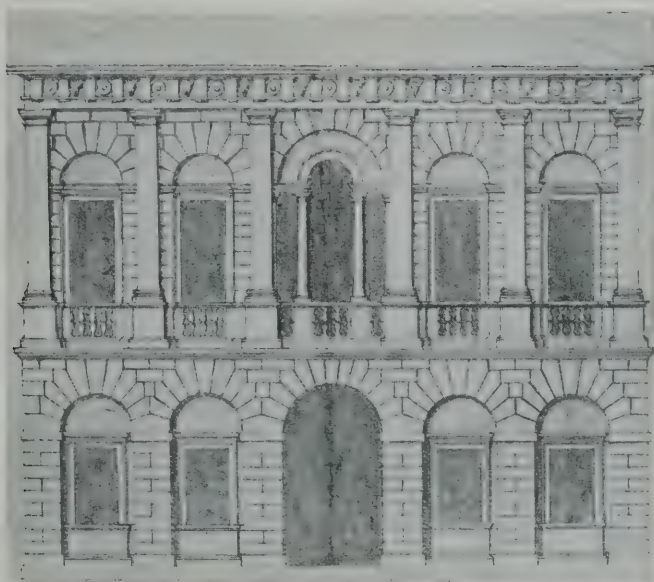


FIG. I.—ORIGINAL ELEVATION, ATTRIBUTED TO PALLADIO, USED BY LORD BURLINGTON FOR GENERAL WADE'S HOUSE  
(Sheet II, vol. xvii, Burlington-Devonshire Collection)

## Inigo Jones as a Collector






BY WILLIAM GRANT KEITH.

CONSIDERING the very limited interest an architect's drawings can have for the layman, it is rather surprising that so many examples of the work even of the great masters of the past have survived. Architectural drawings of pictorial or decorative value are, of course, in a different category, but for those of severely practical character it would be thought there was little chance of their preservation for long. It is not every architect who can make such provision for the keeping of his work as did Sir John Soane. For the preservation of two of the most valuable collections of architectural drawings in England, the work of Inigo Jones and John Webb, we have to thank two eighteenth-century amateurs, Dr. George Clarke and Lord Burlington.

The collection of drawings by Inigo Jones in its original state, and before its dispersal some years after the death of John Webb, must have been a very considerable one. For it contained, besides the drawings connected with his official and other architectural work made during a long and active life, the numerous designs for the staging and costume of the masques. In addition to these were the earlier drawings made by Inigo Jones in the course of his architectural studies abroad. His two visits to Italy alone must have been productive of a mass of material. Speaking

of his master as an "admirer of antiquities," Webb says: ". . . I have lying by me the chiefest of all Christendom designed by his own hand. . . ." We have also to reckon on the fact that both as student and collector Inigo Jones had acquired many drawings by Italian masters. By the time that Webb retired from practice the dual collection must have been greatly enlarged, for he survived Inigo Jones twenty years.

Although there may be no proof in black and white that Inigo Jones's drawings passed into the possession of Webb, the internal evidence is too strong to be denied. For even in their present fragmentary and dismembered state, and after having passed through various hands, the drawings of master and pupil are still to be found together in each of the main collections. Work which Webb carried out independently and often many years after his master's death lies side by side with some of the earliest work by Inigo Jones. Thus with the masque drawings (of all periods) at Chatsworth are also Webb's designs for theatrical work at Whitehall executed so late as 1665. Again, in the Burlington-Devonshire collection, with Webb's own drawings of the King Charles II Block at Greenwich (dated 1663-70) are Inigo Jones's drawings for the Queen's House drawn over thirty years previously. Similar instances may also be noted among the drawings at Worcester College. In the passage quoted above we

(1)  (2)  (3)  (4)  (5)   
These numbers refer to marks on the drawings indicated in the text of pages 106-108.

\* Webb (John), *Vindication of Stone-Heng Restored, etc.*, 1665, p. 118.

have Webb's own word for his ownership of drawings by Inigo Jones.\*

Webb did his best to prevent the dispersal of his collection, bequeathing it to his son William with instructions for its preservation intact,<sup>†</sup> but evidently it did not long remain so. Webb died in 1672 and only nine years later appears the first notice of the dismemberment of the collection. This occurs in Aubrey's biographical note on Inigo Jones, where it is stated that John Oliver, the City Surveyor, "hath all his (Jones's) papers and designes, not only of St. Paul's Cathedral, etc., and the Banqueting-house, but his designs of all White hall suiteable to the Banqueting-house, . . ." The section of Aubrey's MSS. containing Jones's life is dated 1681, so the breaking up of the collection had apparently begun at this time, if no earlier.<sup>‡</sup>

Michael Burghers, the painter, is the next person to be found in possession of at least one volume, and that the most famous, from the library of Inigo Jones, for the annotated copy of Palladio now in the Library of Worcester College, Oxford, bears the inscription on one of the preliminary flyleaves, "*Michael Burghers, his book of architecture 1694 April 21.*" Later, the Palladio passed into the possession of Dr. George Clarke, who, beneath the earlier inscription just quoted, writes "*Bought of M. Burghers March 3<sup>d</sup> 1708/9 G C.*" This was probably an isolated purchase, for Dr. Clarke is said to have acquired the considerable portion of the drawings by Inigo Jones and Webb he amassed, with a number of books from the joint library, from the widow of William Webb.§ These form the Worcester College Collection.

From what source and at what date Lord Burlington secured the large number of drawings by Jones and Webb, originally housed in his villa at Chiswick and now divided between Chatsworth and the R.I.B.A. Library, cannot be said. His collection may possibly represent some of the drawings mentioned by Aubrey as in Oliver's possession. Two sketchbooks at Chatsworth containing drawings by Jones and Webb have Burlington's autograph with the date "May 5 1728," but these were evidently acquired after the purchase of his main collection which provided the principal material for Kent's *Designs of Inigo Jones*, first published in 1727.

Lord Burlington's collection, which included numerous architectural drawings by both Jones and Webb, with the rich series of designs for the masques, and the well known sketchbook that Inigo Jones had with him in Rome, was still intact in the library at Chiswick when it was divided into two portions in 1894. The bulk of the architectural drawings, with a bound set of drawings by Palladio and other Italian masters, were deposited in the Institute Library to form the Burlington-Devonshire Collection, while the masque drawings, etc., with a volume

of designs for the Palace of Whitehall and the sketchbooks were taken to Chatsworth.

The Burlington-Devonshire Collection is naturally divided into two parts, the first comprising the English drawings, mounted on boards and kept loose in trays; and the other, the Italian drawings, similarly mounted but bound in seventeen Russia-leather portfolios. The title stamped on their covers ascribe the whole of their contents to Palladio, and though there are many by other hands interspersed, the series still comprises the most important and most numerous collection of drawings by that master in existence. There is also a small number of unbound Italian drawings kept for convenience in the set of trays with the English drawings.

The mounting of the "Palladio" drawings and their binding in the existing portfolios was, in the first instance, evidently the work of Lord Burlington, but at some time subsequently the portfolios were rebacked, and there is evidence that changes were made in their contents, so that they are not now in the condition in which Burlington left them. For example, in the summarised description of the drawings compiled by Professor T. L. Donaldson and Ambrose Poynter in 1845, which they sent to the Abate Magrini, then writing a life of Palladio, who printed a full translation of their notes, it is stated that among other items Vol. XVII contained drawings of the Villa Madama and the Villa Papa Giulio, in Rome.|| There are no drawings of the former villa in the present collection and those of the Villa Papa Giulio now form part of the loose series of Italian drawings already mentioned. These rearrangements of the drawings were very likely made while the portfolios were being rebacked (presumably between 1845 and 1892) and it is no doubt to this time that we owe certain insertions of fresh drawings. These are easily identifiable owing to the notable difference between the original mounting boards (of uniform type throughout) and the whiter boards of the modern insertions. Happily, these are few in number. It is perhaps also due to the changes made at this period that frequent lapses occur in the arrangement of the drawings in the portfolios. The first seven volumes contain the series of reconstructions of the Roman baths by Palladio, one volume being allotted to each building. But in the remaining volumes the scheme of grouping the drawings according to subject frequently breaks down and a certain intermingling takes place. By an extraordinary error a mount containing three drawings by John Webb is inserted in Vol. XIII (Sheet 11). It seems improbable that such a slip would have passed uncorrected in Lord Burlington's time.

The first knowledge we have of Lord Burlington being the possessor of drawings by Palladio is the publication by him in 1730 of a selection from the series of the Roman

inch square. That they owe their preservation to Webb cannot be doubted, for the extra leaves, both at the beginning and end of the volume, are filled with a series of his notes on Palladio's text illustrated with his own sketches.

† The will of John Webb.

‡ Aubrey (J.). *Brief Lives*, edited by A. Clark, 1898, vol. 2, p. 10.

§ Vertue MSS. (British Museum Add. MSS. 23069, f. 38).

|| Magrini (A.), *Memorie intorno la vita e le opere di Andrea Palladio*, etc., 1846, p. 202 et seq.

\* From another passage in the *Vindication of Stone-Heng Restored* we know in what regard Webb held his master's draughtsmanship, and it would have been his first care to secure the preservation of his drawings. That the smallest scraps from the pen of Inigo Jones were valued by him is shown by one of the sketchbooks at Chatsworth containing a large number of figure and other studies by Jones. These sketches, many of which recall the figure studies in the "Rome" sketchbook, cut from larger sheets, have been carefully pasted into the book in order according to subject. Some of the pieces are less than an



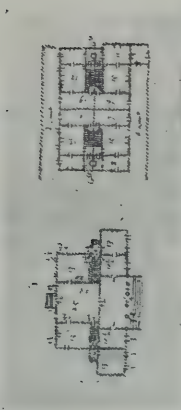


FIG. 2.—COPIES BY JOHN WEBB OF PALLADIO'S PLANS (Figs. 3 and 4)  
(Plans 10 and 11, Sheet 63, Worcester College Collection)

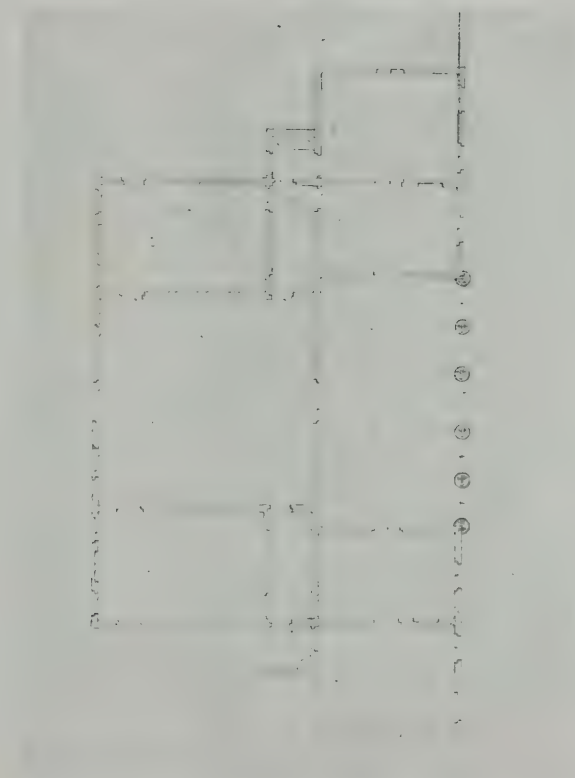


FIG. 3.—UNDESCRIBED PLAN OF A HOUSE BY PALLADIO  
(Sheet 5, vol. xvi, Burlington-Devonshire Collection)

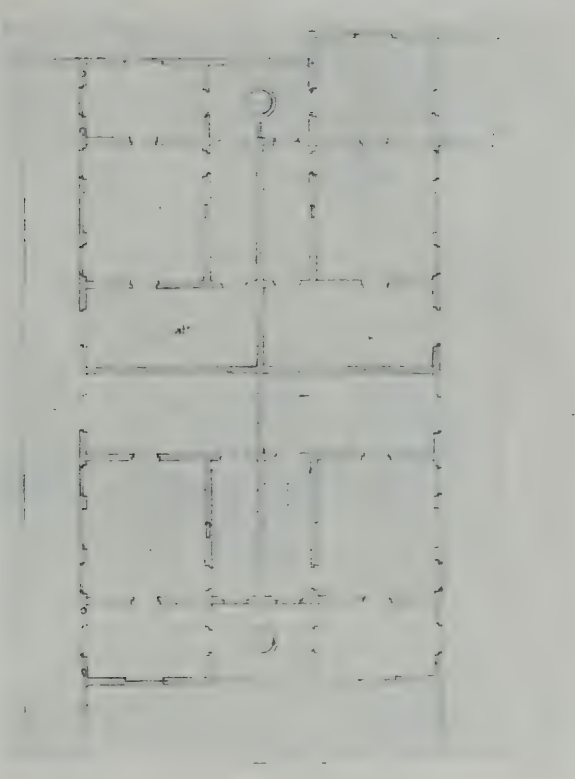


FIG. 4.—PLAN OF A BLOCK OF FOUR HOUSES BY PALLADIO  
(Sheet 13, vol. xvi, Burlington-Devonshire Collection)

baths under the title *Fabbriche Antiche disegnatte da Andrea Palladio*. This rare volume was privately printed in a very limited edition, chiefly for presentation among his circle, and purports to give the Palladio originals in facsimile. Strangely enough, the plates were issued without any descriptive letterpress, and in many instances they are printed without titles, but in a brief preface, couched in Italian, which he addressed to the *cognoscenti* Burlington, in describing his find of the original drawings, explains the omission.

He says, in effect, that Palladio's references in his published writings to another work of his dealing with

found in the villa at Maser were chiefly those of the Baths. And this idea is strengthened if some of the drawings reproduced by Burlington be examined in the light of his description, where he speaks of Palladio having "put the last touches to them," evidently meaning that they were specially finished drawings. Now, out of the whole collection, it is particularly a certain number in the series of the Baths which might be so described, these drawings having all the appearance of being finished with an eye to the engraver. The entire series, it should be said, numbering fifty sheets, represents but a small portion of the whole collection in the portfolios—little more than one-

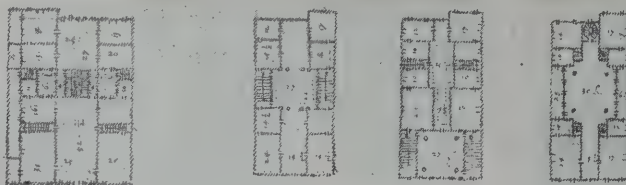


FIG. 5.—COPIES BY JOHN WEBB OF PALLADIO'S PLANS (Figs. 6 & 7)  
(Plans 18—21, Sheet 63, Worcester College Collection)

the antiquities of Rome "filled me with a desire to recover such an inestimable treasure, and during my last travels in Italy I made unceasing search to that end. By good fortune I succeeded in finding many of these drawings, some of which are now published in the following plates. If only I might also have given the observations and notes which the famous author must certainly have prepared to accompany them, but my search for these was in vain. The drawings, bearing a great many of his characteristic notes, were found in the celebrated palace at Maser, in the Province of Treviso, which Palladio built for the nobleman, Daniel Barbaro, and where, it is said, he died. He had put the last touches to them, and they were lying rolled up together as if all in order for publication." After calling attention to the fact that the drawings were executed to three different units of measurement, Burlington continues: "Had their size not made it impossible, I should have included in this volume drawings of certain parts of the Baths, which were originally also in my possession; but I must omit them, as much for the reason I have given as for the fact that these particular drawings are not essential for the complete understanding of the others." He then promises that the "Baths will be followed by a second volume comprising drawings of Arches, Theatres, Temples and other buildings of antiquity, by the same hand." The promised volume never appeared.

One important piece of information is to be gleaned from this account, and that is that Burlington had made two acquisitions of drawings by Palladio. He was already the possessor of a certain number before undertaking this search. Though he by no means makes the matter plain, the impression he gives is that the drawings

fifth. Burlington says nothing of the number of drawings in his possession, and leaves us equally ignorant of the source of his first acquisition.

Lord Burlington, whose interest in art seems to have developed at an early age, paid his first visit to Italy as a youth of seventeen, when in the year 1712 he began the grand tour in company with his friend Thomas Coke, the future builder of Holkham. Coke remained abroad for six years, returning to England in 1718, and though it is not certain that Burlington was with him the whole of the time "during a lengthy sojourn in Italy, the two young men were together. . . . They prolonged their stay in Rome, Vicenza, Venice, and still longer in Florence; while they soon became on terms of great intimacy with all the most eminent scholars and artists of the day.\* In the *Vitruvius Britannicus*† there is a plate illustrating Burlington's design for a casino in the ground of Chiswick House, which Campbell terms the "first essay of his lordship's happy invention," dating it in the year 1717. If the statement can be trusted, then young Burlington possibly produced this design in Italy, which suggests that he was engaged in active architectural study there. At a later period Chiswick House and its grounds became the centre of Lord Burlington's architectural activities. The plans for the famous Palladian villa were apparently first prepared by Campbell in 1727, but the finishing touches were not given to the building until 1736.‡ It is just about this time that we get what is probably the earliest description of Burlington's collection of drawings by Palladio.

\* Stirling (A. M. W.), *Coke of Norfolk and His Friends*, 1912.

† Vol. III, plate 26.

‡ Draper (Warwick), *Chiswick*, 1923, p. 106, et seq.



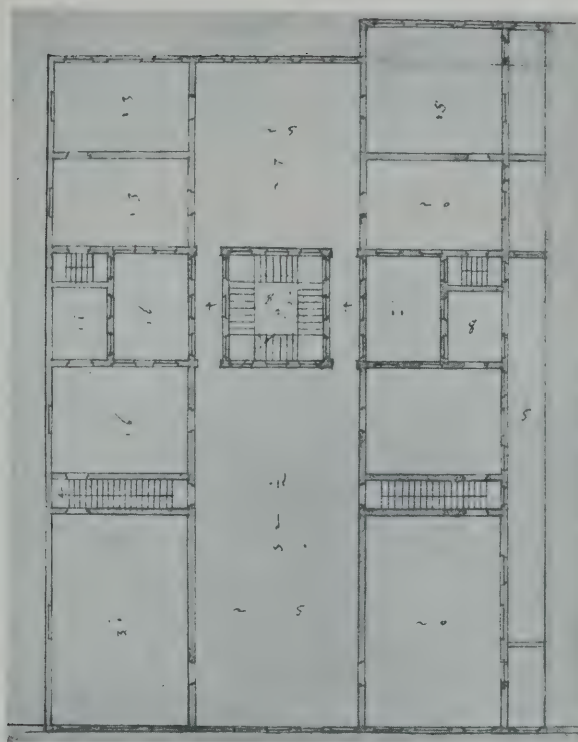


FIG. 6.—UNDESCRIBED PLAN OF A HOUSE BY PALLADIO  
(Sheet 8, vol. xvi, Burlington-Devonshire Collection)

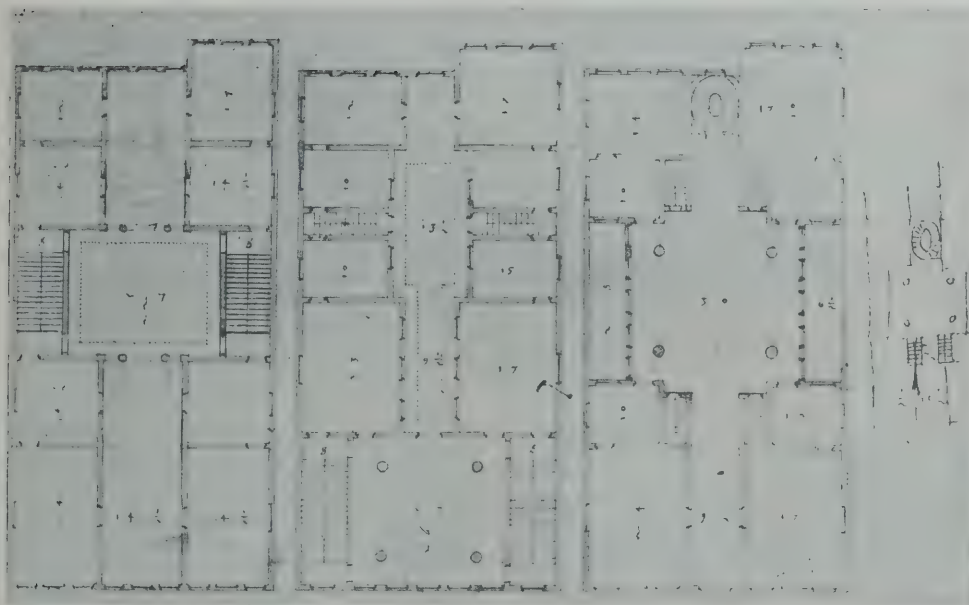


FIG. 7.—ALTERNATIVE PLANS FOR A HOUSE BY PALLADIO  
(Sheet 12, vol. xvi, Burlington-Devonshire Collection)

The Marquis Scipione Maffei, a historical writer of considerable repute in his day, then in the course of an antiquarian tour through Europe, spent some time in England between 1733 and 1736, and during his stay in London paid a visit to Lord Burlington at Chiswick, where he was shown the Palladio drawings. I quote the record of his visit from Magrini,\* who takes the

A few years ago a house was build in London for a general from one of these designs, which was a great success and universally admired. Besides the architectural designs, other drawings are of value in the study of ancient architecture, for they comprise carefully executed drawings of the antiquities of Rome and elsewhere. All the baths with complete plans and elevations. The ancient

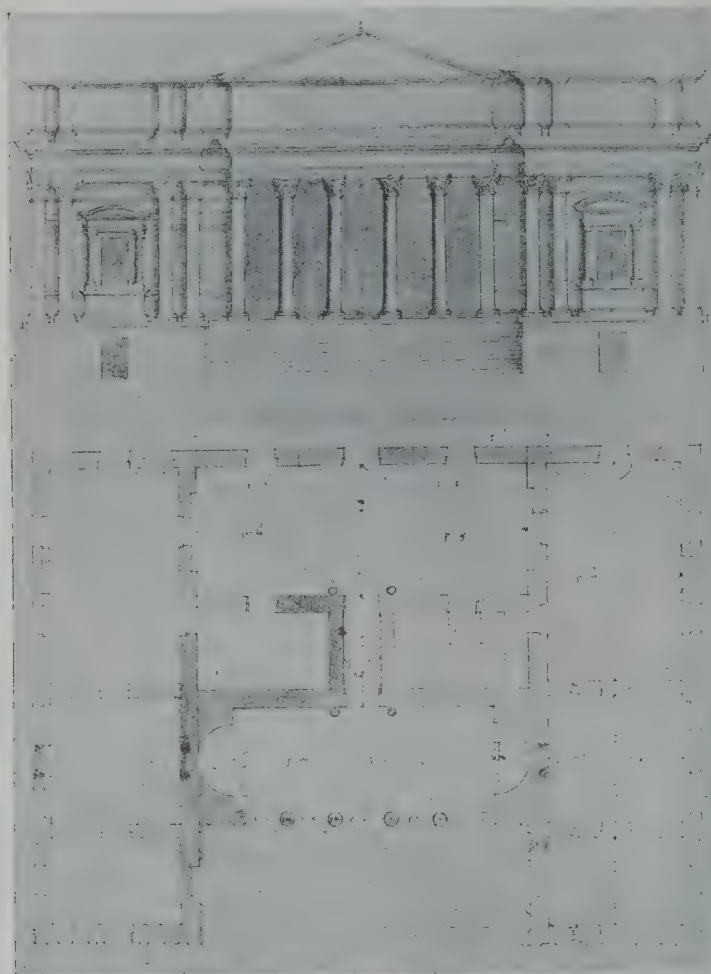


FIG. 8.—PLAN AND ELEVATION OF A HOUSE  
(Sheet 16, vol xvii, Burlington-Devonshire Collection)

passage from a volume of Maffei's *Osservazioni Letterarie*. Maffei is speaking of Lord Burlington, and says: "He has had the good fortune to acquire in Italy more than sixty original drawings by this great man (Palladio) . . . beautifully drawn by his own hand, and inscribed with his writing, which is still easily recognisable. . . . A noble church of his design, doorways, arches, porticos, bridges, and buildings of every kind.

\* *Op. cit.*

remains of Verona are here, too, in detail, and notable among these are complete drawings of the theatre, giving all the dimensions." These last had particular interest for Maffei, who before commencing his tour had produced a weighty folio on the history and antiquities of that city. As for the general's house, which had been built from one of Palladio's designs, this was letting the cat out of the bag with a vengeance! For it was none other than General Wade's house in



Cork Street to which Maffei referred, and it is very interesting to find that the actual drawing utilized by Lord Burlington, still preserved in the collection, fully proves the accuracy of Maffei's statement. This is reproduced in Fig. 1 (Sheet 11, Vol. XVII, B.-D. Coll.), and Burlington's design (if it can be so termed) for Wade's house follows the original with but minor variations in detail.\*

Maffei, it should be noted, speaks of Burlington's purchase in Italy of "more than sixty original drawings" by Palladio, and for the purpose of the present study of the collection this is invaluable evidence. The total number of sheets of Italian drawings mounted in the portfolios is 290. The series of the Roman baths amount to fifty sheets. Consequently, when Maffei speaks of the number of drawings as approximating sixty he obviously did not intend this figure to represent his estimate of the whole collection, but actually, as he says, the particular drawings purchased by Burlington in Italy. For he goes on to give some indication of the extent of the collection by mentioning the great variety of the drawings comprising it, which included "buildings of every kind," original designs by Palladio as well as his measured drawings or restorations of antiquities. The source from which Burlington acquired the rest of his collection—actually the major part—has now to be accounted for.

Hitherto the "Palladio" drawings in the Burlington-Devonshire collection have been regarded as a collection formed at one time and generally believed to have been bought by Lord Burlington in Italy. One of the first indications of the possibility of there being any other than a direct Italian source for some of these drawings was given by the identification in the Worcester College Collection of a copy made by Inigo Jones of Palladio's studies for the scena of the Teatro Olimpico in Vicenza, of which the original is in portfolio XVII (sheet 5).† Inigo Jones drew his copy on the same sheet that bears his own design for a theatre, having a stage with a permanent front, recalling the scena of the Olimpico. As Palladio's drawings shows alternative treatments for the scena, neither of which was exactly followed in execution, the copy drawn by Inigo Jones proves indisputably that he could have made it from no other source, and was at one time in possession of the original, which later passed into Lord Burlington's hands with Inigo Jones's own drawings.

The evidence of this drawing, though important, was not sufficient in itself to justify a suggestion that Inigo Jones had any further part in forming the collection of drawings by Palladio and other Italian masters for which the credit has for so long been given to Lord Burlington. Recently, however, in the course of a further study of the drawings in the Worcester College Collection additional

\*It would have been thought that Campbell, of all people, must have been well aware of the source of the design, and, if so, his appendant remarks to plate 10 of the third volume of *Vitruvius Britannicus*, in which Wade's house is illustrated, are, to say the least of it, disingenuous. "This beautiful design," writes Campbell, "is the invention of the Rt. Hon. the Earl of Burlington, who is not only a great patron of all arts but the first architect."

†See *The Burlington Magazine*, Vol. XXXI, Nos. 173 and 74 (1917).

evidence has been found showing that besides the drawing mentioned many more of the Italian drawings in the Burlington-Devonshire Collection were at one time in the possession of Jones and Webb. For among Webb's drawings at Worcester College is to be found a series of copies by him of a number of these Italian originals, and as in every instance unpublished material was being used, the source of Webb's copies is settled beyond question. The originals in the first place must have formed part of his master's collection which on the death of Inigo Jones became his own property. The copies thus drawn by

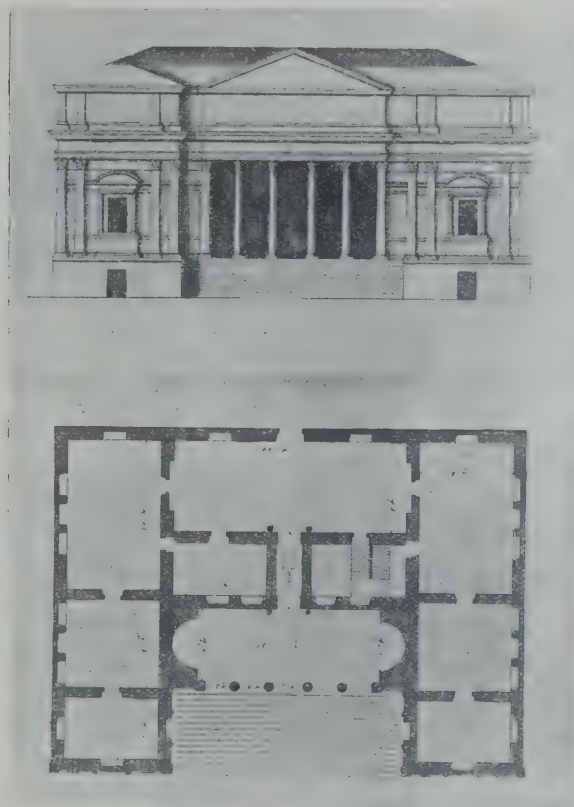


FIG. 9.—COPY BY JOHN WEBB OF THE ORIGINAL DRAWINGS (FIG. 8)  
(Sheet 58, Worcester College Collection)

Webb and so far identified, number seventeen in all, and these, with the exception of three, made from drawings of Roman arches, are studies after original architectural designs, including plans and elevations of houses, gateways and doorways.

Taking the house plans first, Sheet No. 63 of the Worcester College Collection contains a series of twenty-one plans drawn by Webb. They are sketches drawn to a thumbnail scale in a hatched line, and have hitherto been looked upon as original studies. There is a similar sheet among his drawings in the Burlington-Devonshire Collection, and these would appear to be actually of his own design. But in the present sheet six of the plans, if no

more, are literal copies of Italian originals. Two of these plans (Nos. 10 and 11 on Webb's sheet) are reproduced in Fig. 2. The first (No. 10) is drawn from the original shown in Fig. 3 (Drawing No. 5, Vol. XVI, B.-D. Coll.). It will be seen that Webb carefully follows the dimensions inscribed on the original. The second plan in Fig. 2 (No. 11) is similarly copied from the original, Fig. 4 (Drawing No. 13, Vol. XVI, B.-D. Coll.). This is an interesting scheme for a block of four small houses approached on two sides by an enclosed entrance way. Webb follows the original in every detail and translates the Italian "*cale*" into "*A lane*." Each pair of houses is served by a well, inscribed "*pozo*" on the original, the well enclosure being partly roofed on three sides. The open part is indicated by the word "*scoperto*." Webb inscribes "*Cood*" on his copy, evidently a contraction for "*covered*," in reference to the roofing.

Similarly in Fig. 5 (Drawings Nos. 18-21 on Webb's sheet) we have his copies of the plans shown in Figs. 6 and 7 (Drawings Nos. 8 and 12, Vol. XVI, B.-D. Coll.). In redrawing the first plan (Fig. 6) Webb reverses his copy (18, Fig. 5), but otherwise it is identical with the original, all the dimensions agreeing. The three plans in Fig. 7 are variant schemes for the same site, and these are redrawn by Webb in 19, 20 and 21 on his sheet without any change.

The plan and elevation of a house given in Fig. 8 are reproduced from the drawings on sheet 16, Vol. XVII, (B.-D. Coll.), and Webb's copies of them appear in Fig. 9 (Sheet No. 58, Worc. Coll. Ser.) Webb's is a careful transcript to a slightly larger scale, one small difference being that he completes the outlines of the roof where these are left unfinished in the original.

A very interesting example of Webb's development of a design based on his preliminary copy of a Palladio original is seen in Fig. 10 (Sheet 64, Worc. Coll. Ser.). It will be observed that Drawings 1 and 2, which are varied both in the treatment of the double loggias (partly necessitated by the introduction of a basement storey in the upper design) as well as in the rustication of the respective fronts, are developed from the half-elevation, drawing 3. The original from which Webb took his inspiration in the first place is reproduced in Fig. 11 (Drawing, Sheet No. 25, Vol. XVII, B.-D. Coll.). This appears to be a study by Palladio for the house of Floriano Antonini, in Udine, the first design illustrated in the second book of the *Architettura* (fol. 5).<sup>\*</sup> The published version of the design shows a slightly recessed kitchen wing on the left of the front, and as this is not seen in the present drawing, which shows an open double loggia as the central feature of the façade, it evidently represents the rear elevation, not illustrated in the *Architettura*, but corresponding with the plan given there. Webb's sections form the final proof that this is the design he was working upon, for they not only show a central entrance hall with a vaulted ceiling supported by four columns agreeing with Palladio's plan, but the principal dimensions figured in Drawing 2 also correspond with it.

In the next example we find Webb studying a piece of Roman architecture, the so-called Arch of Jupiter in Verona, from the careful measured drawing of the gateway

seen in the frontispiece (Drawing, sheet No. 22, Vol. XII, B.-D. Coll.). Webb makes as close a copy of this as the small scale of his sketch allows, Fig. 12 (Drawing 2, Sheet 68, Worc. Coll. Ser.), but draws the detail of the cornice in elevation where in the original it is represented in perspective. The original drawing is inscribed "*questo archie j verona et e mezurato cō el piedi anticho et sie oncie 16 p. pe*," and as Webb's inscription reads "*Arch in Verona. This is measured by ye ancient foote*," we have here further proof, were that needed, of the source of his copy.

Space does not permit of the examination in detail of the further copies made by Webb, but they may be briefly listed here. On Sheet 65a of the Worcester College Series are three plans of villas, two of which are copied by Webb from Palladio's original plans (Sheets 1 and 2, Vol. XVII of the Burlington-Devonshire Collection). Palladio's plans, it may be said, are possibly studies for the Villa Mocenigo, Marocco, illustrated in the second book of the *Architettura* (fol. 54). The original of the third plan on Webb's sheet is not to be found, but in all probability his drawing is a copy of an original plan by Palladio now lost. Sheet 66 of the Worcester College Series shows three studies of gateways (Drawings 5, 6 and 7), which are copied from originals in the Burlington-Devonshire Collection. Two of these are among the unbound series of drawings, and the third is to be found in Vol. XV (B.-D. Coll.) of which it is Sheet 3. On Sheet 70, Drawing 3 is a study of a doorway of which the original is also among the loose series of the Burlington-Devonshire Collection. Sheet 69 of the Worcester College Series shows the elevation of two Roman arches, one of which Webb redraws from Sheet 13 (verso), Vol. VII (B.-D. Coll.), but the original of his second copy is not now to be found in the collection. On Sheet 20, Vol. XVII (B.-D. Coll.) is an elevation of a one-storeyed building with an arcaded front, and Webb makes an exact copy of this to a smaller scale in Drawing 2, Sheet 67, of the Worcester College Series.

These numerous copies made by Webb from originals appearing in different portfolios throughout the series of drawings, hitherto considered to have been formed by Lord Burlington directly from Italian sources, would in themselves give reason for a new view to be taken of his collection. But to the illuminating evidence furnished from Webb's hand there has now to be added further proof that the original collector of the major part of this important series of drawings was not Lord Burlington, but Inigo Jones. The new evidence for this highly interesting fact comes from a rather unexpected source.

As is well known, the famous copy of Palladio's *Architettura* in Worcester College Library, which belonged to Inigo Jones, contains a mass of critical notes, memoranda and jottings inscribed by him not only during his second Italian visit in 1613-14, when he was studying architecture in Vicenza and elsewhere, but also at various dates after his return to England. A version of the notes was published by Leoni in his third edition of Palladio's *Architecture* (1741-42). Leoni's handling of the MS was very unsatisfactory, however, for not only does he edit and correct the material in a very free fashion, but his transcript cannot be accepted as accurate, and certainly not as complete. From this, the only published version, we get no inkling of a series of related inscriptions

<sup>\*</sup> Palladio (A.), *I Quattro Libri dell' Architettura*, etc., Venice, 1601.



which appear on the lower margins of thirty-seven folios here and there throughout the four books. These notes are made in reference to the plates, and though varying in form, are all of the same nature, and when studied together give the impression that Inigo Jones meant them as a connected record of drawings of Palladio's illustrations which he was checking off against the plates in the

scribed in the series, the plates showing the Palazzo Porto being one; the note here is, "*A drawing of this and that over the leaf al in one sheete the first he maad for the worke*" (fol. 9, Lib. II). The elevation of the Palazzo Valmarana has the inscription: "*The drawing of this fatciatta and more then is hear of the Portico within*" (fol. 17, Lib. II).

There is no clue to be found among the other marginal notes as to the meaning or intention of these particular entries which stand in a different category from the rest. But if certain of the drawings by Palladio in the portfolios



FIG. 10.—THREE STUDIES, BY JOHN WEBB, DEVELOPED FROM PALLADIO'S ORIGINAL ELEVATION (Fig. 11)  
(Sheet 64, Worcester College Collection)

book. In their simplest form the inscriptions appear seven times merely as "*a drawing of this,*" but most of the entries are variously amplified. On Folio 24 (Lib. II) beneath one of the plates of the Doric order the note reads: "*A drawing of this somewhat varried in ye Peddistall and Impost of the arch,*" and on the next folio (25) "*A drawing of this Bace the Pedistal lower.*" Several of the illustrations of Palladio's houses in Vicenza are also in-

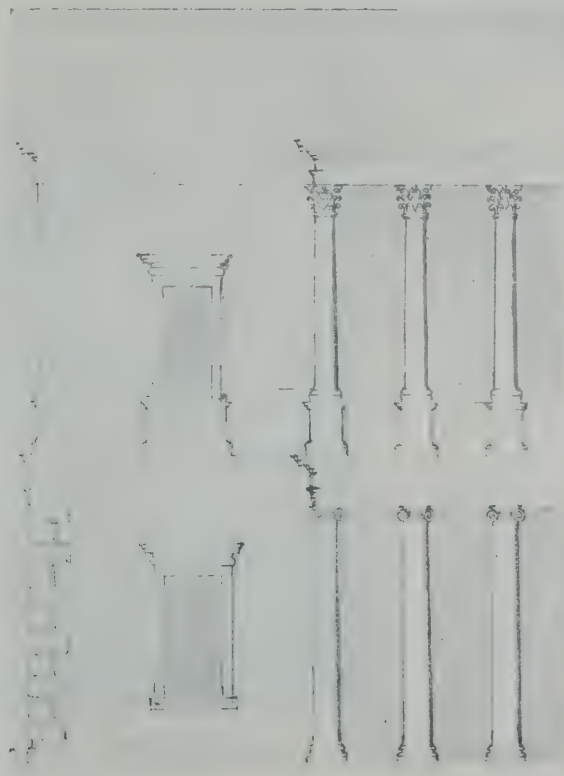


FIG. 11.—ORIGINAL STUDY BY PALLADIO, PROBABLY FOR THE HOUSE OF FLORIANO ANTONINI, UDINE  
(Sheet 25, vol. xvii, Burlington-Devonshire Collection)

of the Burlington-Devonshire Collection be examined in conjunction with Inigo Jones's notes against the plates in the *Architettura* the meaning of his entries becomes apparent. For in the portfolios are a great many of the original studies for the published plates. Inigo Jones, having acquired Palladio's drawings, proceeded to record those in his possession as he identified them with the plates in his copy of the *Architettura*. Where he noted any variations between Palladio's original sketches and the published versions he amplified the entries to that effect, and, happily, it is thus possible to prove beyond any doubt that the drawings in the Burlington-Devonshire Collection now being considered were the actual ones which

he himself collected and to which his notes refer. There is further evidence to show that many others besides these come from the same source, and they will be dealt with later.

Taking as the first example the elevation of the Palazzo Valmarana mentioned above, Inigo Jones says in recording the drawing in his possession, "*The drawing of this facciata and more then is hear of the face of the Portico within.*" Meaning that besides the elevation of the main front, which with the plan is all that Palladio illustrates of the building, the sheet he had also showed the façade of the internal court, which was "*more then is hear*"—i.e., more than was given in the book. In Fig. 13 (Drawing 4, Vol. XVII, B.-D. Coll.) reproduced from Palladio's

present sheet, measuring  $11\frac{1}{8}$  inches by  $14\frac{7}{8}$  inches, has been cut in two at some time and rejoined. It may be said here that the whole series of drawings identified with the plates in the *Architettura* and others not published by Palladio, but obviously belonging to the same group, must originally have come from one drawing book, or set of drawings. A careful comparison and measurement of them shows that the size of the original sheets was approximately  $12\frac{1}{2}$  inches by  $16\frac{1}{2}$  inches. As a result of having been kept folded in half most of them had eventually worn through along the crease and were subsequently cut and mounted together again. A few of the sheets have survived uncut across the centre and where weak at the fold have been backed with narrow gummed-on

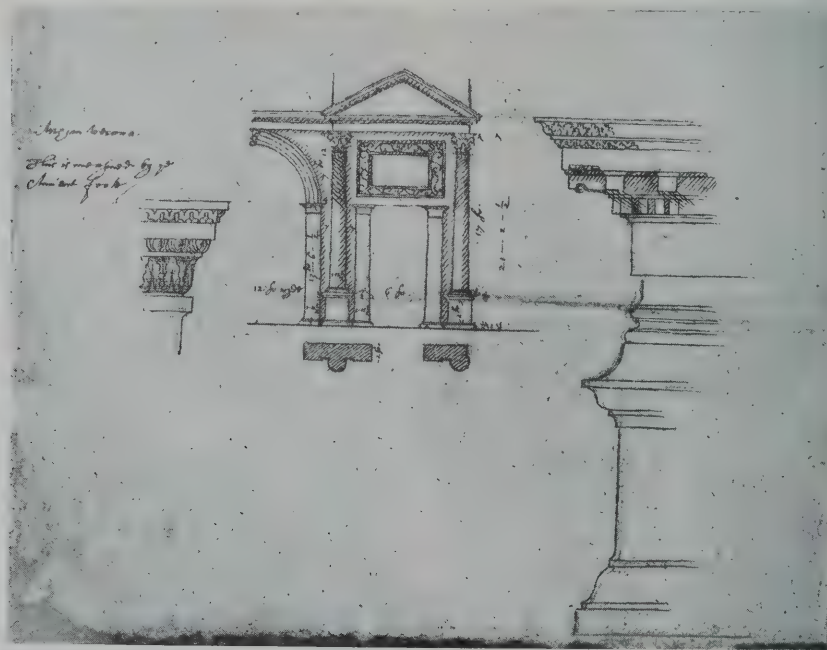


FIG. 12.—COPY BY JOHN WEBB OF THE ORIGINAL DRAWING BY PALLADIO. (Frontispiece)  
(Sheet 68, Worcester College Collection)

original drawing, we evidently have the actual sheet, for this so precisely tallies with Inigo Jones's description that its identity can hardly be questioned. The façade to the court is on the right half of the sheet.

In illustrating the Palazzo Porto Palladio gives, on folio 9 (Lib. II) a half-elevation of one front with the corresponding half-elevation of the façade to the court on folio 10. Inigo Jones's note on folio 9, quoted above, reads "*A drawing of this and that over the leafe al in one sheete the first he maad for the worke,*" and in Fig. 14 (drawing sheet 3, vol. XVII, B.-D. Coll.) we have the drawing just as he describes it. The original study differs in various minor details from the published plate and must subsequently have been redrawn, which accounts for Inigo Jones's comment upon it as "*the first he maad for the worke,*" in other words, a preliminary study. The

strips. Evidently all the margins have been trimmed in the process of mounting.

Palladio's original studies for two of the four plates of the Doric order illustrated in the *Architettura* (Lib. I, ff. 24 and 25) are seen in the left half of the sheet (a) Fig. 15, (sheet 6, vol. X, B.-D. Coll.). In the book the large scale drawing of the base, pedestal and impost mouldings are given as a separate plate (folio 25). Inigo Jones's note on folio 24 says that the drawing was "*some-what varried in ye Peddistall and Impost of the arch,*" and on folio 25 he adds "*the Pedistall lower.*" There are other differences observable between the original and published versions of these sheets of the order, but the notable variations are those mentioned by Inigo Jones. The series of letters marking the parts and mouldings of the column and pedestal inscribed on the original drawing correspond



exactly with those of the published plate. The sheet is made up of two pieces, each half measuring  $11\frac{3}{8}$  inches by  $7\frac{1}{8}$  inches. The right half (*b*) shows an Ionic capital and entablature, which is evidently an original study for the plate on folio 36 (*Architettura*, Lib. I), and in Inigo Jones's copy is one of his notes regarding a drawing of the plate.

A study by Palladio for the composite capital and entablature appears on the verso of the left half (*a*) of the foregoing sheet. This is apparently the original on which he based his plate of the composite order illustrated on fol. 50, Vol. I of the *Architettura*. The published plate shows various revisions in the measurements of the parts, but otherwise keeps pretty closely to the original.

Palladio during his long residence in Italy, for he was a well known collector, and that he had made a serious study of architecture we know from his famous little treatise.\* It might have been taken for granted that two such prominent personalities of their time as Wotton and Jones would have been acquainted, but it is nevertheless interesting to find this link between them. The latter part of Inigo Jones's note recalls his description of the drawing of the Palazzo Porto which he also regarded as being Palladio's preliminary study, afterwards amended in the published plate.

It is not possible on this occasion to detail and illustrate the further identifications made of the other drawings listed by Inigo Jones with the series in the Burlington-

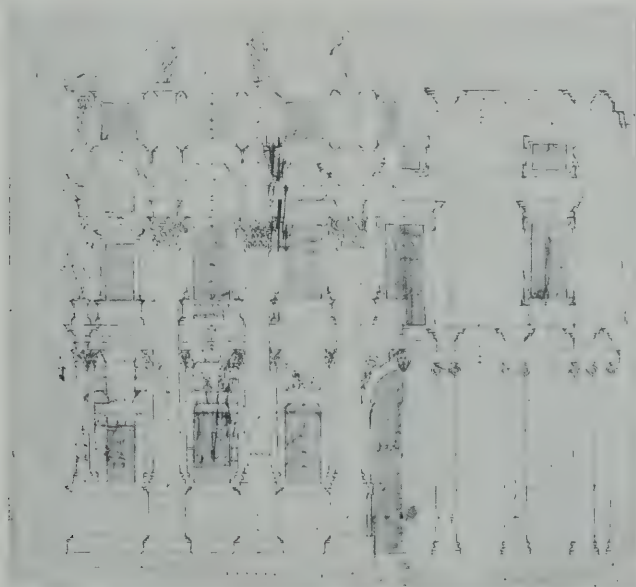


FIG. 13.—ORIGINAL STUDY BY PALLADIO FOR THE PALAZZO VALMARANA,  
VICENZA  
(Sheet 4, vol. xvii, Burlington-Devonshire Collection)

The note inscribed by Inigo Jones on this plate in his copy of the volume is one of unusual interest. It reads "*A drawing of this Sr Ha : Wotto the first that he did for this booke.*" Although his habit of contracting words and names of persons and places, of which the present is a typical example, might at first obscure the identity of the person to whom Inigo Jones here refers, it seems pretty evident that this can be none other than Sir Henry Wotton, who is similarly mentioned in five other instances in this series of notes. In other places the name is still further contracted to "*Sr He Woo;*" or "*Sr Ha Wo.*" Of the drawings with which Sir Henry Wotton's name is thus connected, the present appears to be the only sheet still preserved in the existing collection, and from Inigo Jones's bare mention of him we do not gather what that connection implied. It may be that the particular drawings had been lent to Wotton, or that he himself had acquired drawings by

Devonshire Collection, it may be said, however, that out of the thirty-seven so listed fifteen are still preserved in the collection. These include the elevation and section of the Palazzo Thiene, Vicenza, the elevation and half-section of the Pantheon, and the plan and section of the so-called temple of Diana in Nismes, among others. Of the remaining twenty-two drawings noted by Jones there seems to be now no trace. But he evidently did not enter up the drawings in his possession beyond a certain number, for there are many more original studies for the plates of the *Architettura* than those which he listed. These additional sheets represent thirty-one of the plates, so that up to the present forty-six drawings have been identified with Palladio's book.

Besides the drawings connected with the *Architettura* there is a further number which, from their style of execu-

\* *The Elements of Architecture*, 1624.

tion and the size of the sheets on which they are drawn, may safely be placed in the same group. Had Palladio lived to produce the further volume of Roman antiquities which he promised to publish these would no doubt have been included in it. Among them are drawings of the Porticus Octaviæ, the Janus Quadrifrons, the Arch of Constantine, and the so-called Tomb of St. Helen, in Rome; the theatre at Pola; with the Arch of the Gavi, the so-called Arch of Jupiter, the Porte dei Leoni and another gateway in Verona.

From the evidence so far brought to light in the course of the present study of the drawings in the Burlington-

tion marks throughout the entire collection, because these, as might be expected, almost invariably occur on the verso of the sheet. In some instances the paper happens to be thin enough for the inscription to be seen through the sheet, but where the paper is thicker, more opaque, or where parts of a drawing obscure the mark on the verso, its identity must remain unsettled until such time as the edges of the paper mounts may be raised from the boards, and the drawings left attached along one margin, as has fortunately been done in the original mounting of a fair proportion of them.

Although the total number of marked sheets cannot be

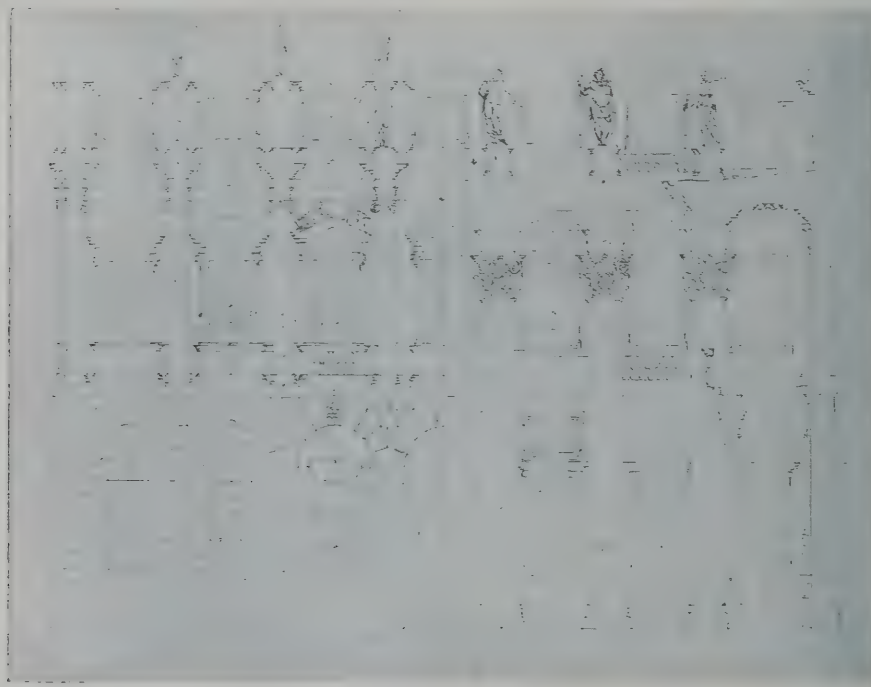


FIG. 14.—ORIGINAL STUDY BY PALLADIO FOR THE PALAZZO PORTO, VICENZA  
(Sheet 3, vol. xvii, Burlington-Devonshire Collection)

Devonshire Collection, first of Webb's use of many of them, and secondly, of Inigo Jones's references to a still larger group, it will be seen that the number of drawings that may be allotted to Lord Burlington's purchases in Italy is considerably diminished, but there is now proof of another kind to show that the total to his credit must be still further reduced. This takes the form of a system of identification marks inscribed, not only on the drawings already dealt with, or referred to, but on a large additional number which by this means is linked up with the rest.

It should be said at the outset that the method of mounting a great many of the sheets in the collection, where the drawings are laid down on boards along all four margins of the paper mounts on which they are usually inlaid, prevents the following up of the identifica-

estimated for the reason given above, for the purpose of the present survey the drawings may be divided into three main groups according to the three different marks inscribed on them. These consist of a number, written in figures, followed by a symbol. The mark inscribed on the drawings in the first group is the following: 150: [see footnote, p. 95 (1)]: The inscription in every instance is written in a different ink and in another hand from that of the drawings themselves. It is done by one hand throughout, and it may be said at once that the hand seems to be that of John Webb. The drawings bearing the first mark, numbering some 69 sheets, although scattered indiscriminately over six volumes of the bound collection, when grouped together by this means are found to comprise the whole series connected with Palladio's *Architettura*, as well as the



companion sheets already mentioned.\* This fact speaks for itself and is significant of the purpose of the marking which evidently points to a system of classification. The mark on the drawings in the second group is 49 : [p. 95 (2)] : and the sheets so far found in this set number 32. The third mark is 54 : [p. 95 (3)] : which appears on 23 sheets.

That a system of marking was to be noted among Inigo

being all connected with one building. In this particular instance the inscriptions seem to be in Jones's own hand and in all likelihood he instituted the method.† That Webb adopted a system of marking for his drawings is proved by two sheets of his at Chatsworth bearing the mark 296: VII : which not only exactly resembles those given above from the Burlington-Devonshire Collection

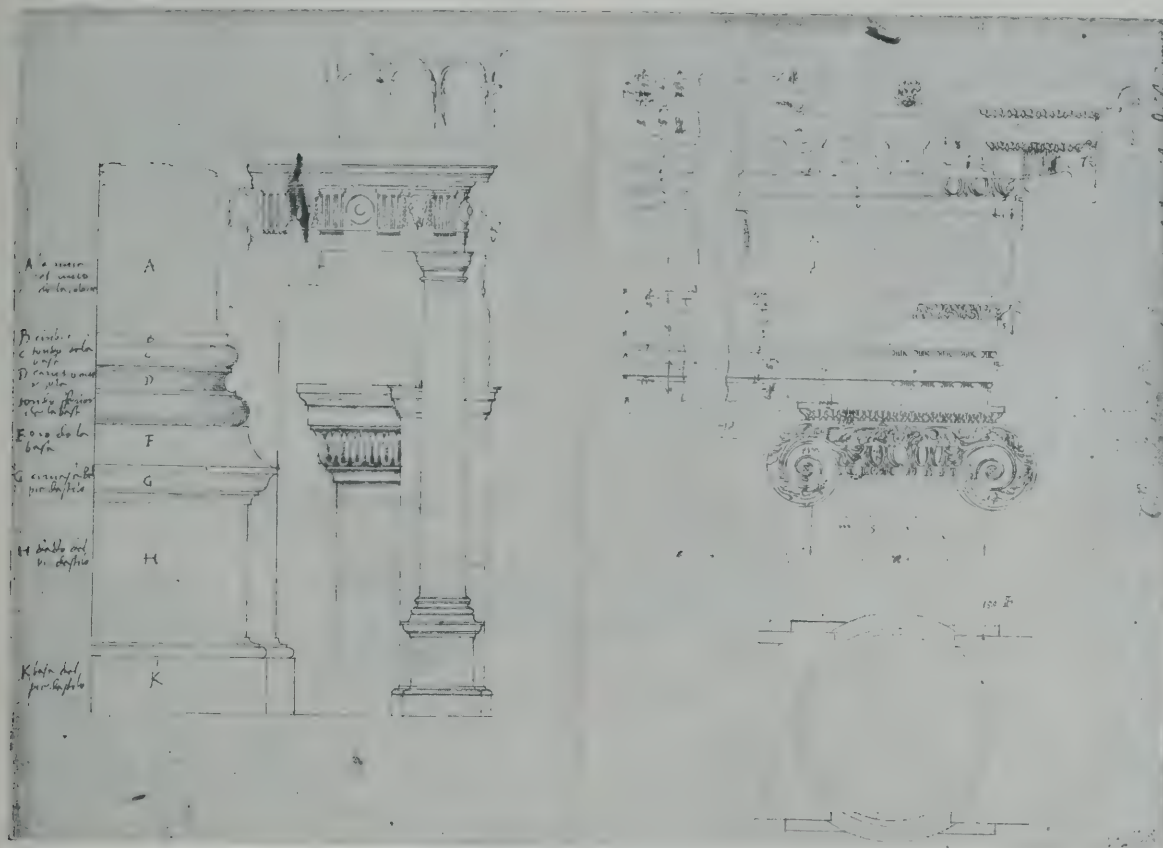


FIG 15.—ORIGINAL STUDIES BY PALLADIO FOR THE DORIC AND IONIC ORDERS.  
(Sheet 6, vol. x, Burlington-Devonshire Collection)

Jones's own drawings was first pointed out in a description of certain designs by him found in the James Gibbs collection, where three of the sheets are each inscribed with the same combination of numbers and letters, they

\* An exception has to be noted in the shape of a drawing by Vincenzo Scamozzi included in the group. This is a drawing of the five orders with notes inscribed in Scamozzi's characteristic hand. Others by him are to be found in the collection here and at Chatsworth, the sheet there being his design for the setting out of one of the "streets" added by him as a completing feature of the scena of the Teatro Olimpico, Vicenza, after the death of Palladio.

An example of this mark occurs on the right half of the sheet reproduced in Fig. 15, where it will be seen inscribed immediately above the plan of the capital. The same mark is inscribed on the verso of the left half of the sheet, and this forms additional proof that in the course of mounting the

but is inscribed in the self-same manner. The mark here links together two separated drawings of dissimilar character, and only one of these being titled they would otherwise not be connected.

Marks of the same kind as the foregoing are also to be sheets together (done for Lord Burlington) no attention was paid to the earlier marking of the drawings. This reversal of the earlier arrangement of the sheets occurs in other instances: † The mark used on these three drawings, which represent decorative work at the Palace of Oatlands, is 308 λμξ. A small sketch of architectural detail drawn on a separate slip pasted on the back of sheet 81 in the portfolio of drawings of the Palace of Whitehall at Chatsworth also has this mark, and as the sketch has apparently nothing to do with the Whitehall series it may thus be assigned to Oatlands. See *Some Hitherto Unknown Drawings by Inigo Jones*, by W. G. Keith (*Burlington Magazine*, vol. XXII, 1913, p. 218 et seq.)

found on many of the drawings of Inigo Jones at Chatsworth. In a sketchbook containing architectural details are three inserted pieces inscribed as follows, 103: [p. 95(4)]: And among the masque drawings two marks of the same type are to be noted. Curiously enough one of these, 296: VII: , seen on nine sheets, is the same mark which Webb used for the two drawings of his just mentioned.\*

That Webb should extend the system of marking to the drawings by Italian masters in his keeping would be only natural. They are drawings of a very miscellaneous character, mostly untitled, and drawn on paper of different shapes and sizes, and unless mounted and bound up in portfolios as was ultimately done by Lord Burlington, some means of grouping them would appear very necessary. It will never be known in what state this collection of drawings came into Lord Burlington's hands, but in the course of mounting, which was doubtless done under his direction, the classification by marks, if noticed at all, was entirely ignored, and this accounts for the frequent separation of related drawings.

\* The full significance of the marks found on the masque drawings has yet to be explained, for in many instances sheets similarly marked bear no apparent relationship to one another. Some fifty-six of the drawings have the mark 252: [p. 95(5)]: and this, as it happens, is also to be seen on the back of the self-portrait of Inigo Jones in the Burlington-Devonshire Collection.

It is not suggested that a rigid or complete system of classification by marks is to be looked for among the drawings of Inigo Jones and Webb, or of those once in their possession, yet the method in so far as its application to the Italian drawings in the Burlington-Devonshire Collection may be followed at present, has been of service as well in bringing together companion sheets now separated as in forming additional proof of the real provenance of a large part of Lord Burlington's collection.

It will be recalled that Burlington speaks of certain drawings of the Baths being too large for inclusion in his book and that these were the ones originally in his possession before the find at Maser.† Now on two of the large unpublished sheets is to be seen the mark belonging to the second group (49: [p. 95(2)]:).‡ Here would appear to be the final evidence required, and there is good reason to believe that when the whole of the drawings in the Italian series may be properly examined it will be found that not only the drawings already shown, either directly or indirectly, to be associated with Inigo Jones and John Webb, but the bulk of those forming this valuable collection come from the same source.

† Many of the large sheets measure over four feet, and one or two, over five feet in length.

‡ The inscription is not accessible on the other drawings owing to the manner of their mounting.

*I have to thank the Provost and Fellows of Worcester College for permission to reproduce the drawings in their possession.—W. G. K.*





## Stone Preservation

BY EDWARD P. WARREN, F.S.A. [F.].

THE following report was kindly prepared by Mr. Warren at the request of the Science Standing Committee.

26 June 1925.

After a long experience and many experiments on the repair and preservation of stone, both of limestone oolite and of sandstone, I have come to the conclusion that the best preservative coating to apply to the face of stonework, old or new, is some form of oleaginous and adhesive dressing that will allow—

1. For the slight but palpable movement of the stone and its jointing by contraction and expansion or by settlement, which is constant where the building it belongs to is upon a clay foundation.

2. For the escape of water which, from any cause, has found its way into the stone or its jointings, and which, if near the surface and subjected to severe frost, is certain to flake and shatter that surface by the action of expansion of ice.

Observation of stone surfaces coated with oil paint shows that such coating is an efficient preservative; this is very evident in the case of painted inscriptions upon churchyard monuments and the like, where it is often observable that the lettering, after many years' exposure, stands well forward of the face of the unpainted surface of the stone, which has worn away with the action of weather.

Paint being, of course, inapplicable to external stone faces, it is necessary to obtain the necessary protection by other means—and I am of opinion that a solution of paraffin wax, which leaves an almost imperceptible waxy surface on stonework, gives a very good protective coating.

Limewash, whose preservative qualities have been well known for many centuries, cannot be applied as a rule, except in an extremely diluted form, to the faces of stonework, old or new, but I have found that, even in an extremely diluted form, so weak, in fact, as scarcely to show on the surface of stone, it certainly seems to harden and protect that surface quite perceptibly.

I employed this in 1912 to Magdalen Tower at Oxford, over the stone surfaces of both old and new, after the repairs were finished.

The repair and preservation of stonework at Oxford, in which I have served a long apprenticeship, is a matter of peculiar difficulty, and needs very great care. The stone with which most of the old buildings was faced, since the fourteenth century, is a friable sandstone from quarries some two miles from the city, and known as Headington stone.

The lower levels, of good hard stone, of these quarries seem to have been completely worked out by the beginning of the fifteenth century, and subsequent work, where it was not possible to bring stone by river from distant quarries—in the Cotswolds or elsewhere—was carried out in the following manner (with deplorable results). As the upper levels, which were easily accessible and which provide a poor soft stone in thin layers only, incapable of furnishing thick blocks, the practice

grew up of getting the appearance of large blocks by face-bedding the stone in ashlar work, the facing being from 6 inches to 8 inches thick, but, doubtless, looking handsome and satisfactory when new.

The winters of Oxford—say, from the end of October to March—are very damp and constantly foggy, and, perhaps for that reason, the frosts are very sudden and often severe; the porous, face-bedded stone takes in moisture for nearly an inch from its surface, and the freezing of this moisture rapidly destroys the surface, flaking it off and forming large blisters containing disintegrated sand. This accounts for the leprous look of many of the buildings erected between 1400 and 1800. For the bases of walls, and for steps and thresholds, it was usual, however, to employ slabs of "old hard Headington," from the lower and less accessible levels, and these have stood well as a whole. For parapets, pinnacles and for carved features, as in Magdalen Tower and parts of the Bodleian Library, and several of the college buildings of the sixteenth and seventeenth centuries, harder and more costly stone was obtained from distant quarries, such as Windrush, Burford, Milton, and Taynton, the last an orange yellow stone used frequently for finials and ornaments with charming effect. These stones, though often found to be decayed, have resisted the effects of time and weather very much better than the local stone.

An interesting contrast may be seen at Worcester College between the group of small medieval buildings, the old hostels, of great religious houses built in the fourteenth and early fifteenth centuries, and the eighteenth century buildings.

The former, built and faced with the old hard stone from the lower levels, are still, though much weather-worn, in fairly good condition; the latter, faced with face-bedded soft stone from the upper levels, are superficially in a deplorably mouldering and shabby condition. The walls, however, being very thick and built with rubble, some of which is derived from older buildings and set in good strong lime mortar, are, in these and similar buildings, generally sound and durable.

In dealing with such decayed surfaces, my procedure is as follows:—To brush off with stiff fibre brushes all loose scale and detached fragments, to cut out and replace with hard oolite any stones too much decayed or too thin to be safely left; to fill in all cavities and small broken corners and portions of otherwise sound courses with a special hard weather-resisting cement (compounded of ground Cotswold stone and Portland cement) and finally to dress down the whole with two coats of preservative solution—Browning's (which contains paraffin wax). This treatment of the surfaces seems to give satisfactory results; for string courses, parapets, hood-moulds and the like, it is necessary either to substitute new hard stone, which I do as little as possible, or to make up broken portions with the stone cement above alluded to.

In Oxford, it is observable that some of the old box

ground stone, in buildings erected from about 1820 to 1850, has stood very fairly well up to the present, but that Bath stone as a rule stands badly there. The same is true of stones which stand well elsewhere, such as Doulting, and even, in very exposed positions, Mansfield and Ancaster.

A stone which has now been used in Oxford for between 40 and 50 years, with success so far, is Clipsham (oolite) stone from the old hard bed quarries (in Rutlandshire), and this stone I generally employ. It soon goes grey, and assimilates well with the old surfaces. Another stone, of which I have used large quantities in Oxford, and es-

pecially on Magdalen Tower, for ashlar facing, is Peagrit—a very hard, rather coarse-grained oolite from a quarry near Cheltenham. This is now rather difficult to obtain.

My general conclusion, after the experience of over 25 years in repairing old stonework at Oxford, and also at Cambridge and elsewhere, is that no “preservative” should be applied to the external surfaces that does not allow the stone—as masons say—to breathe, *i.e.*, to allow the escape of gases and vapour from evaporation, and that small and superficial breakages can be adequately repaired with carefully selected stone cement.

## Reviews

ARCHITECTURE. *Sir T. G. Jackson, Bart., R.A. Macmillan and Co., Ltd., London. 1925. 25s. net.*

When the heroine of de Morgan's *Somehow Good* was asked whether she would like to have a stepfather, she replied “it depends on who.” The reader of this book, if asked whether it fulfils its purpose, might equally reply “it depends on what.” In this matter, he gets no help from the title, which is the bare word Architecture, and it is not until he reaches the Epilogue that this purpose is revealed—namely, to distinguish the two principles which have guided architecture at different periods; the first being that of “self-growth, freedom, and common sense,” the second “authority, dogma, and the book,” or more briefly, the FREE versus the BOND; and from these phrases it will be gathered that the book is a piece of propaganda for the mediæval as against the classic and Renaissance point of view.

It is written in the form of a discursive survey of the Styles and some of their chief examples, a method employed long ago, and in far greater detail by Fergusson, who devoted about a thousand pages to material which is here covered in three hundred, and the author's preferences may easily be guessed from the disproportion in the space given to the various periods.

Greek architecture, Minoan and Hellenic, receives but ten pages of letterpress, in the course of which the assertion is made that in the Doric style “sculpture was bestowed on structural features”; whereas it was surely a sign of the unerring æsthetic instinct of the Greeks that they placed the figure sculpture just where the structural function is absent—that is, in the pediment gable, and in the metopes, which are, in theory, open spaces between the triglyphs. The only example in Athens of the contrary method, the Caryatid Portico, was an experiment of Asiatic origin, and was probably felt to be a failure, as it was never repeated; while the mistaken policy of “bestowing sculpture on structural features” can be seen in the sculptured base drums of the later Ephesus temple.

The author quotes Plutarch's astounding remark about the position and value of artists, and observes

that there was very little appreciation of art at the time, and that it was taken as a matter of course. But the point of Plutarch's argument is that the “well-born young man,” though he *does* admire the work of Pheidias, still “would not wish to be a Pheidias,” showing the contrast between appreciation of the work and contempt for the artist. Certainly no writer of the period gives descriptions of its architecture, but equally no one anywhere describes a trireme, and probably for the same reason, that both appeared too well-known to need any description at all.

The Etruscan and Roman chapter is even more concise, being completed in nine pages, after which the expansion begins with Byzantine and reaches its height with Romanesque and Gothic, which together occupy about two thirds of the whole book. In these the Fergusson method is followed, and there are chapters headed “Window Tracery,” “English Flowing Decorated,” “The French Flamboyant Style,” and so on.

Turning to the Renaissance, we find the account of Italian work extending to Palladio and Vignola, but not beyond them, so that except for the chronological list at the end of the book the Salute at Venice and Bernini's Colonnades at St. Peter's might never have existed. In the chapter on the earlier English period a good deal of space is given, as we should expect from the author's own inclinations in design, to the more picturesque work such as Kirby Hall and Burghley, but full appreciation is shown for the genius and versatility of Wren. Following the usual custom, the Library at Trinity, Cambridge, is illustrated by the view from the Court; though the “back” facing the river is incomparably finer, and probably the finest piece of abstract architectural design which Wren ever conceived, since it depends on pure form, with only a minor use of classic elements.

The French Renaissance is treated with the same emphasis on the freedom of the earlier work in the Chateaux of Touraine, as contrasted with the “rule and dogma” of the later centuries, and in the Epilogue, Blondel is set up as a kind of symbol of the Renaissance,



only to be demolished, reasonably enough, when it is at the same moment admitted that no eminent architect of his own or any other period would agree that his rules were binding either in theory or practice.

These far-off echoes of a far-off Battle of the Styles no longer carry conviction. It always used to be argued that every stage in mediæval progress followed naturally and logically on what had gone before, while every change in the Renaissance was "imposed from without." But consider the point at which the curvilinear English Gothic rapidly and unexpectedly gave way to the rigid Perpendicular: could this have been logically predicted in advance? Not only is there no indication of it, but no similar change took place in the French flamboyant work. On the other hand, so far as freedom of design is concerned, there is far more originality and invention in the towers and steeples of Wren's City Churches than could be found in any collection of Gothic towers and spires within the same limit of time in a mediæval period: and the author himself comments on Wren's freedom in handling architectural form and asks "what can be further from ancient example than his steeples?"

The fact is that, given the intellectual Renaissance, the architectural Renaissance was inevitable, because the modern civilisation which then began has more in common with the intellectual point of view of Greece and Rome than with that of the Middle Ages. The language of architectural expression was inspired by the classic language; but so far as "convention" goes, the language of a Gothic period—the cusped tracery, mouldings, and crockets—is just as fixed and dogmatic within its period as are the columns and cornices of a later time. And as for Blondel, his rigidity was easily equalled, as the author agrees, by the votaries of the Gothic revival, culminating in Ruskin's absurd demand that modern architecture should from a given moment restrict itself to copying one transient form, either of Pisan or of Tuscan local methods of design.

It is explained in the Preface that the book was written during the author's last illness, and that he was not able to correct the proofs: this would account for certain misprints due to a misreading of the MSS., such as Coronati for Cosmati, and S. Semignano for S. Gimignano; also perhaps for a remarkable mistake of historic fact in the chapter on the Netherlands, where the rhetorical question is asked, "What can be said for the wanton destruction of the beautiful Town Hall of Louvain—an act of sheer German brutality?" The answer is that nothing need be said, because this act never took place at all: on the contrary, the Town Hall is still intact, and was carefully preserved by the Germans, who used it as a Headquarters. No doubt the author was thinking of the University Library of Louvain.

Sir Thomas Jackson was responsible, during his long

and scholarly career, for many books of interest and authority, notably the records of his researches on the Eastern side of the Adriatic. One cannot feel that it was altogether wise or desirable to publish this last work when its author was no longer at hand to supervise its production.

RONALD P. JONES [F.].

THE LONDON PERAMBULATOR: *By James Bone.*  
[London: Jonathan Cape, Limited. 12s. 6d. net.]

As the title implies, this is a book out of the ordinary. The author, a kindly Scot, has set out to give Englishmen all that is best of the impressions he has received during twenty years of London life. In this he has been assisted by his brother, Muirhead Bone, one of the most distinguished living draughtsmen.

From the time of the venerable Stow each century has produced writers obsessed with the subject of London. As evidence of this activity there are the seventeenth century guide books and the formidable battery of volumes, beginning with Hatton and ending with "Metropolitan Improvements," that enriched the eighteenth century. And so the tale could be continued with the Essays of Charles Lamb, Leigh Hunt, Charles Dickens, Walter Besant, and others. In addition there are the modern surveys of Old London, compiled parish by parish, which probe into the very dust of the past. James Bone knows all such authorities, but he seeks to give a new vision of London and all that it means. For this reason he avoids history as it is dealt with in the ordinary way and masters his vast subject with a technique that makes the reader feel the appeal to be a personal one.

The book opens like a fairy tale with reference to the Keys of London. One by one the puppets start forth from the pages and go about their occasions; the birds sing; the trees change with the seasons; St. Paul's looms dominant above the haze, and the river in its sinuous turns plays tricks. Unobtrusively the fronts and the backs of London houses are brought to notice, while curious fancies are wrought in the mind. It becomes clear that the best parts of London are gone, that Ariel has been banished and Waterloo Bridge is labouring for a respite.

Here is a book on London, at last, written as such a book should be written. And you will decide when you have read this book that it has been written for the ordinary man as well as for the architects, for each and several, for the stranger within the gates as for the Londoner to whom London is so unaccountable. The buildings are there, and so are all the denizens, nay, the very atmosphere of fog, coal gas and smoke, the bursts of sunshine, the pale tints of spring, the voices of men and the whirring of wheels, and the dull roar and the restlessness—nothing has been overlooked. And so you will read on through the chapters with an interest that quickens. The strangely familiar face of London becomes more intimate; the ironic spirits take possession of the pages and blur the lines of print; one wonders at the dark associations, the beauty that is of the soul of London, the remorse and the pity. There is the chapter on Portland

stone, the chief attribute among the material evidences of London's stern visage. Writers have written on Portland stone from time immemorial as it should be described in a specification, but, as the author states, "there is no book on it even in the R.I.B.A. Library." "How could our poets, how could Mr. Kipling, have missed such a theme?" In his description of a "London Calendar" the author conjures up a fantastic personage, Primavera Urbana. It is well done in the spirit of those attendant figures out of Italy that accompany Hollar's drawings of London from the Thames. On runs this gay lady; we see the streets change colour, the painters ascending the ladders, and newly planted scaffold poles heralding the triumph. In a trice we are arrived at midsummer, and as quickly the fogs arrive, first as light diaphanous mists and later of the pea soup variety of winter. James Bone has an especial word for the Four Inns of Court, and so has every man who has sallied forth notebook in hand to jot down their idiosyncrasies. We read of the true Londoner, where he lives, what he does, his goings and comings; it is a startling picture as brilliantly coloured as the crowded Rowlandson drawings in the "Microcosm." There are the old women at the street corners, and the old men; the curious medley of costumes from the time of Henry VIII to the dress of the bank messenger strangely reminiscent of the forties of the last century. You will feel something tugging at your heart strings; I can hear you say, "This is the London I have known, alas! it is changing." One is led page by page to ramble through the Club Streets, to study the ancient shops and the purlieus north of Euston. The bargees and watermen in turn become friendly. Later there is a description of the town from the roads and from the air. But you may well ask, "Why should a reviewer restate all the facts that are set forth so delectably?" My answer is, there is no other way to do it. In his last chapter James Bone deals with the London that has vanished, the town of yesterday that most of us have cherished as part of our being. There should be sackcloth and ashes for this spoliation.

This book has been written as much for architects as any pettifogging volume that aims at recording dry-as-dust data. It treats of the soul of the mighty city, causing tears as well as happy memories. Through the written word one is conscious of the upright walls of London, the merciless paving stones and the never-ceasing tide of humanity. The architecture of London is the conventional scenery; it is as definite as life itself. The wonder is that London should possess the secret of suppressing absurdities in the concrete. We may well say that this insatiable minotaur among cities demands tribute from the youth of the world. Gone, yes, but *Resurgam*.  
A. E. RICHARDSON [F.].

**THE CLERKS' WELL.** Notes on the Ancient Well and adjacent Retaining Wall of the Benedictine Nunnery of St. Mary, Clerkenwell: The Parish Clerks and the Plays they Played at Clerks' Well: Fagge's Well and Fackeswell Brook, Cow Cross, Smithfield. By Arthur Crow, F.R.I.B.A.

This is a reprint in pamphlet form of a paper read by Mr. Arthur Crow [F.] before the London and Middlesex Archaeological Society: it traces from old records the history of the

Holy Well, Clerkenwell; the earliest reference being that of Fitzstephen in his preface to the life of Thomas à Becket. Mention is also made by Stow in his Survey of London, where he describes Clerks' Well as being "curbed about square with hard stone, not far from the west end of Clerkenwell Church, but close without the wall that incloseth it. The said church took the name of the well, and the well took the name of the parish clerks, who of old time were accustomed there yearly to assemble and to play some large history of Holy Scripture." Mr. Crow, quoting from Stow, John Strype, Storer and Cromwell and William Pinks, recounts the history of the well until owing to repeated pollutions it was finally closed up in 1857 and its position lost.

In 1924 in the course of excavations for rebuilding 14 and 16 Farringdon Road, the site was discovered.

The pamphlet is illustrated with maps, views, diagrams, and by ten photographs of the excavations depicting the well and well chamber, both as discovered and after the removal of the water from the well chamber. Mr. Crow's pamphlet is of interest as showing the connection of the well with the ancient Benedictine Nunnery of St. Mary, which played a not inconspicuous part in the history of the citizens of London.  
W. P. S.

## Correspondence

THE ARCHITECTURE OF REGENT STREET.

21 Eaton Place, S.W.1.

12 December 1925.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—In an interview which I gave recently to a reporter of the *Evening News*, I pointed out that the blame for the design of the new Regent Street should be laid not upon the architects who carried it out but upon the Crown authorities who imposed it. This was clearly stated in the interview as published.

I also excepted from my criticisms the Quadrant, and such buildings as I know to have been designed under no restriction. This was not stated in the interview as published.

At the time the matter seemed hardly to need correction, since a number of the architects concerned, on being similarly interviewed, spoke of their bondage to an enforced design not of their making.

I have reason to believe, however, that I have been considered by some as criticising architects for that for which the main point of my interview was that they were not responsible. I shall therefore be grateful if by publishing this letter you enable me to make now the correction which I appear to have been mistaken in thinking unnecessary.—I am, Sir,

Yours faithfully,  
H. S. GOODHART-RENDEL. [F.]

## WATERLOO BRIDGE.

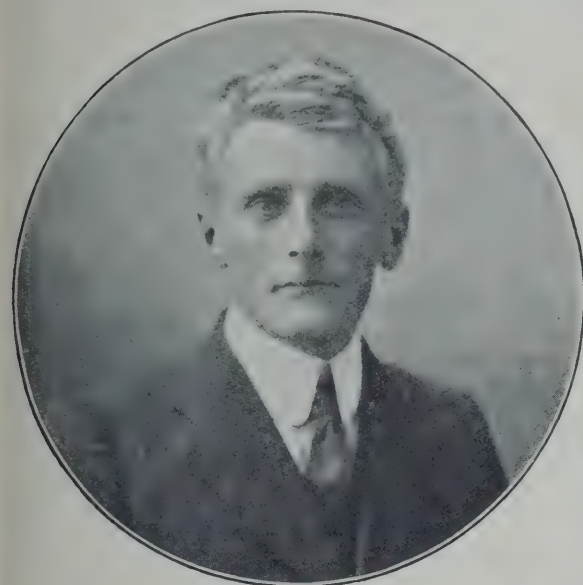
On the 15th December, after a discussion which lasted three hours, the London County Council rejected the proposal to ask the Government to set up a technical Commission of Enquiry on the question of underpinning Waterloo Bridge, and carried by 82 votes to 32 an amendment for the reconstruction of the Bridge.



# The Late Professor Maxwell Lefroy

## MR. LEFROY'S WORK IN CONNECTION WITH WESTMINSTER HALL ROOF.\*

On behalf of the members of the Royal Institute of British Architects, the Science Standing Committee wish to pay a tribute of respect to the late Professor Harold Maxwell Lefroy, whose work on the restoration of the roof of Westminster Hall has been of great assistance to those members having problems of a similar character.



The following article, showing the value of Mr. Lefroy's work, has been contributed by SIR FRANK BAINES, C.B.E., M.V.O., Director of Works, H.M. Office of Works :—

The sad and premature death of the late Professor Harold Maxwell Lefroy has caused very great regret amongst those who had personal knowledge of the Professor and his work. When the examination of the superb open timber roof of Westminster Hall was made in 1913, it was discovered that the roof was structurally unstable, primarily as a result of the depredations of the wood-boring (Death Watch) beetle, *Xestobium Tesselatum*. The larvae of this beetle have hollowed out huge cavities in many of the timbers, reducing some to a mere shell.

Apart from the question of preserving the roof without material addition of new timber, it was essential to find a scientific detergent to the beetle which had caused such serious damage during the five centuries and more of its life. A number of eminent scientists were therefore consulted and the facts relating to the condition of the roof were placed before them and their advice asked.

Amongst them was the late Professor Lefroy, and from

the inception of the enquiry he took the keenest personal interest in the problem, visiting the Hall with me upon many occasions and examining samples of timber obtained from the Hall, in which live larvæ were known to be working.

These he studied at the Imperial College of Science for many months, and there he experimented with various detergents in the attempt to devise a safe and satisfactory insecticide.

As a result of his knowledge of, and his interest in, the problem, the department decided generally to accept his advice as to the means to be adopted for the elimination of this pest ; and eventually he suggested a solution composed of various chemicals, which, in his opinion, would exterminate the beetle and prevent future attack.

Professor Lefroy was requested to work to certain primary conditions which it was thought necessary to impose as governing the use of an insecticide. These conditions were briefly as follows :—

- (1) Non-inflammability.
- (2) Absence of offensive smell to which exception would be taken by members of Parliament.
- (3) No effect as regards discolouration of the timber.
- (4) That the solution should not be a volatile poison, and yet be an effective insecticide with some degree of permanence in action.

These conditions were recognised as limiting the choice of materials, but they were observed very faithfully by Professor Lefroy, who eventually produced a solution made up as follows :—

Tetrachlorethene	..	..	..	50	per cent.
Cedar Wood Oil	..	..	..	6	" "
Solvent Soap	..	..	..	2	" "
Paraffin Wax	..	..	..	2	" "
Trichlorethylene	..	..	..	40	" "

(The last used as a diluent only).

The basis of Professor Lefroy's recommendation was scientific, as he took into consideration all the known facts concerning the life history of the beetle, endeavouring to destroy it at certain specified phases of its life. His theory was based on the following facts :—

The "Death Watch" beetle is known to go through a complete metamorphosis after its initial stage as a minute egg laid within cracks and crevices of the timber by the female beetle. The minute larva hatches out by natural temperature, and immediately bores its way into the oak, continuing its destructive action in the timber for a period of roughly three years. This is the stage when the destruction in the oak occurs, the tunnels being generally in a longitudinal direction up and down the grain of the wood.

The larva finally is transformed into a pupa or chrysalis, after having bored its way to within a microscopically thin film of wood adjacent to the outer air. After a lapse of time, the perfect beetle emerges, eating its way through the timber film, and taking its nuptial flight.

\* Full report on the restoration of Westminster Hall Roof appeared in the June number JOURNAL R.I.B.A., 1922.

Professor Lefroy concentrated his attention upon the periods in the life history of the insect, *e.g.* :—

- (a) When it enters the timber, and
- (b) When it emerges from the timber as a perfect beetle.

He recognised the practical impossibility of destroying the larvae in the heart of the wood, and he ruled out methods which involved impregnation of the whole bulk of the timber, either with or without pressure.

Professor Lefroy also considered that it was impossible to destroy the insect during the period of its complete emergence and flight from the wood. This might indeed have been done by the use of a very poisonous gas, which, however, could not be used in structures subject to public use.

It was finally found that the liquid devised by Professor Lefroy had an adverse effect upon the health of workmen ; as one of its principal ingredients was discovered to be a virulent liver poison. The workmen were therefore equipped with gas helmets, and enquiry was directed towards the discovery of another detergent, not subject to the disadvantages of the first.

As a result of an extended investigation a suggestion received from Messrs. Heppells, the chemists, was submitted to Professor Lefroy ; and it was agreed that an equally effective and non-poisonous alternative solution was in fact found, and the utilisation of the first solution was then abandoned.

Dr. Lefroy experimented with the proposed new solution, and agreed that its detergent effect was quite satisfactory. The principal ingredient is the mixture of ortho-para-dichlor-benzene, with other ingredients such as solvent soap, cedar wood oil, etc.

After the outbreak of the Great War in 1914, Professor Lefroy was engaged on many special entomological enquiries which precluded him from taking the keen personal interest in the problem of the eradication of the Death Watch beetle, as he had done previously. He did, however, assist in the proposed method of the application of the insecticide, in order to ensure that the maximum success should be obtained, and, on many occasions, visited the Hall before 1916, in which year he went to India and to Australia, in order to undertake enquiries into, and give advice upon matters of special entomological difficulty in those countries.

After the termination of the War, he again took up the study of the special problem of the eradication of the Death Watch beetle, and about the time of his death, he wrote to me suggesting certain modifications in the solution then being used as a detergent. He was not quite final as to their superiority, as he apparently had many liquids under examination and extended trial. Like a true scientist, he never contended that he had found a complete solution of the problem of destroying *Xestobium Tesselatum*, and he outlined a further extended enquiry, which he hoped to undertake in the future. His untimely death has robbed science of a very original personality whose most distinctive attributes were those of a high enthusiasm, directed by scientific thoroughness, and an unquenchable belief in the final success of investigations conducted by the exact application of physical and natural laws.

## Obituary

CANON H. F. WESTLAKE.

Minor Canon H. F. Westlake, F.S.A., M.V.O. died very suddenly on 27 November, at his house in the Cloister of Westminster Abbey, after being present at the funeral service to Queen Alexandra. The announcement came as a swift shock to an exceptionally great number of friends, and his death will be a permanent loss to the antiquarian and historical studies in which he was a master. He was only 46 years old, and that he had accomplished so much in this short term of years is quite amazing. A particularly handsome and strong-looking man, there seemed to be nothing of the invalid about him, but he had a severe illness two or three years ago and that may have prepared the way for the final overstrain. Born at Gloucester in 1879, he was educated at Christ's Hospital in the City of London and at Pembroke College, Oxford.

In 1909 he went to Westminster as Minor Canon, and a year later was made Custodian of the Abbey. "There could not have been a happier appointment, for thenceforward he devoted himself with enthusiasm to the study of the Abbey, its architecture, its historical associations and its wealth of mediæval art." The Abbey documents might well stir the mind of a born historian. For some dozen years or more before Mr. Westlake came to Westminster the late Dr. Scott, who had retired from the Manuscript Department of the British Museum, had laboured steadily at indexing the great mass of material, and at his death Mr. Westlake took up and continued the task. The wealth, the burden, of these documents can hardly be guessed, and I remember that Dr. Scott told me that, in some branches like charters, he believed it to surpass the British Museum. Here Mr. Westlake soon gathered material for history and wrote an admirable account of the City of Westminster for the "English Towns" series, as well as studies of St. Margaret's Church, and of the Palace of Westminster. In 1916 he published a *New Guide to the Abbey*, and in 1923 a fine big scale *History of the Abbey*, in two volumes, "in which the whole story of the Abbey was told with such mastery that it will long remain the indispensable authority." His knowledge of the fabric itself equalled his grasp of the documents. He had a way of writing lucidly and almost lightly which makes the large volumes delightfully easy to read. This immense piece of work would probably not have been his biggest gathering from the documents if he had continued to be their guardian. Only a week or two ago, and nearly the last time I saw him, he told me that he was hoping to take up the publication of a Calendar of the historical material in the Abbey archives. He was most kindly, open, and brotherly to



deal with and his death is a personal loss and sorrow to the writer.

W. R. LETHABY.

#### EDMUND LIVINGSTONE WRATTEN [F.].

To write of one who has been taken from us so suddenly and so prematurely, at the very point of the severance of a close friendship of twenty-seven years, is an almost impossible task. Like another architect whose early death we still mourn—W. H. Ward—Wratten won in a peculiar degree the affection of all with whom he came into contact. He spent himself unsparingly and maintained the highest traditions of an arduous but ill-requited calling.

He was articled to the late James Williams (surviving partner of George Devey) on 13 June 1893, and carried on the whole of his business, for the most part unaided but with conspicuous ability, until Mr. Williams's retirement in 1905. Just before this Mr. Williams took Wratten into partnership, and from September 1905 Wratten and I took over the practice which we have since carried on together. He had studied at the Schools of the Architectural Association, and passed the examinations of the Royal Institute, becoming an Associate in 1902. He was elected to a Fellowship in the present year.

In July 1915 he joined the R.A.M.C., and was on active service in France with the 2-1st London Field Ambulance (56th Division) from February 1916 to January 1919. He was mentioned in dispatches (1916), and was in the following actions: 1916, Gommecourt, Somme (Combles); 1917, Arras, Ypres, Cambrai; 1918, Vimy, Bullecourt, La Grande Hounelle (the final advance). The war affected his health seriously and no doubt contributed to his early death.

Wratten's architectural work was chiefly for private clients and consisted mainly of country and town houses. He could without difficulty have made a name as a black and white artist; his illustrations to *London Survivals* (Ditchfield) and to *Gardens in the Making* are examples of his skill. He won the open competition in the 56th Division for a design for the cover of the Divisional magazine, and he illustrated the published history of the unit.

Tuned to the finer issues of life and art, he was perhaps too sensitive to sustain for long the strain of modern business life, but he will long be remembered as a fine artist and a loyal comrade.

WALTER H. GODFREY.

#### FRANCIS SEYMOUR LESLIE [Hon.A.].

Colonel Francis Seymour Leslie, retired list Royal Engineers. Hon. Associate R.I.B.A.

Born 15 October, 1851, son of Francis Seymour Leslie, Esq., of the Home Office. Educated in Paris, Stubbington House, Fareham, and the Royal Military Academy, Woolwich.

Commissioned in the Royal Engineers, 1871, and retired as Lieut.-Colonel and Brevet-Colonel in 1903.

Served in Gibraltar, Egypt and Bermuda. In Egypt he carried out the trigonometrical survey of the city of Alexandria in the years 1886 to 1889.

In Bermuda he was Commanding Royal Engineer and was responsible for the preparations and maintenance of the camps for the Boer prisoners of war during the South African War of 1899-1902.

Early in his Army service he specialised in architecture and building construction, and in 1891 he was appointed assistant in the Barrack Construction Branch of the War Office, and later became head of this branch. This appointment he vacated in 1898 on promotion to Lieut.-Colonel and posting as Commanding Royal Engineers at Exeter.

Examples of his work are to be found in the cricket pavilion of the Royal Military Academy, Woolwich; a memorial screen in the Garrison Church at Woolwich and the Intarfa Barracks in Malta.

He was elected a member of the Society of Architects in 1891, and later became a Vice-President. He was also a member of Council and Hon. Examiner of the Society.

He was elected an Honorary Associate of the Royal Institute of British Architects in 1918.

During the war Colonel Leslie served as a member on the Executive of the Architects War Committee, to the work of which he devoted much time and sympathy.

For many years he was an examiner in practical geometry and building construction for the Science and Arts Department, South Kensington.

LT.-COL. P. G. FRY, C.M.G., D.S.O.

It is impossible for me to express how much I feel the privilege of being permitted to add one of the last pages to the volume of memories of Peter G. Fry. To cast one's mind back over 30 years and recall the first meeting, the first impression, is no easy matter unless one associates with that meeting some deed or action beyond the commonplace. It was during the first week when I was being initiated into the mysteries of our craft and struggling with the Tuscan Order, and the printing in particular, that Fry came to my rescue, and to the best of my recollection inked in all the titles. Such was the little deed that meant so much, and rarely if ever do I see the Tuscan Order without recalling the incident. To one other personal matter I am bound to refer, otherwise I should feel a traitor to his memory. It was entirely due to his advice that I left the office (where he was an assistant) and became articled to Henry Dare Bryan, a man for whom Fry had the greatest admiration. I have never ceased to acknowledge my indebtedness to Peter Fry for such a vital change in my professional career. I had known him scarcely a week, but I did not hesitate to trust him. What he did for me, he did for many. He was ever ready to extend a helping hand; to him it was as natural as the salutation of the day. He was an indefatigable worker, and up to the time of relinquishing practice—a couple of years ago—it was a custom rather than an exception for him to work far into the early hours of the morning. His practice was extraordinarily varied, but he had the ability of rapidly absorbing technicalities and quickly getting at grips with a scheme. First and foremost Fry was a constructionalist, but by sheer force of character and unrelenting study the æsthetic quality of his works reached a standard far beyond the average. For many years he was actively interested in the Weston-super-Mare School of Art. As a member of the Bristol Society of Architects, he did much to uphold the status of the profession in which he was esteemed by all his colleagues.

C. F. W. DENING [F.].

### PRESIDENTIAL BADGE OF THE WESSEX SOCIETY.

The members of the recently formed Wessex Society of Architects, which incorporates the Bristol Society of Architects and the Gloucestershire Architectural Association, have marked the inception of the amalgamation of their Societies by providing a badge for their President.

The badge is of 9 carat gold and depicts the Golden Dragon, the old ensign of Wessex set up by King Harold at Senlac and carried by Ethelhun at the battle of Burford.



This Presidential badge is the work of Wessex artists and craftsmen, for it was modelled by Mr. W. G. Simmonds, the well-known sculptor of Oakridge, from a sketch design by Mr. Thomas Falconer, F.R.I.B.A., of Amberley, and cast by Messrs. Singer of Frome.

The reverse of the badge is engraved with the same design as the face, and the rim has the following inscription:—"This badge was presented to the Wessex Society of Architects by Members, A.D. 1925. G. C. Lawrence, President."

### INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS.

The following letter has been addressed by the Secretary to all the members of the Royal Institute and to its allied Societies.

30th November, 1925.

DEAR SIR,—The circulars recently issued to Architects over the whole country by the Incorporated Association of Architects and Surveyors have now received the consideration of the Council of the R.I.B.A. They desire at once to inform all members both of the R.I.B.A. and of the Allied Societies that nothing done by the R.I.B.A. in promoting legislation for the registration of Architects will affect detrimentally the interests of any person now living by the practice of Architecture.

This alleged danger to the interests of Architects not members of the R.I.B.A. put forward in the circular of the Incorporated Association of Architects and Surveyors as

a reason for Architects becoming members of that body is therefore non-existent. No person now living as an Architect will be prevented from or restricted in the exercise of his profession by any Registration Act promoted by the R.I.B.A.

The Council of the R.I.B.A., in view of the recent amalgamation with the Society of Architects, regard the formation of another architectural body as more likely to weaken than to help the profession, and would draw the attention of Architects outside the London area, who are still unattached to any organisation, to the fact that they can, by becoming members of an Allied Society of the R.I.B.A., obtain fuller advantages than any that can be offered by the suggested Incorporated Association of Architects and Surveyors.

Members of the R.I.B.A. or of the Allied Societies who help to establish independent architectural organisations are *not* assisting the cause of Registration, but are dividing the profession and destroying the professional unity which has only just been achieved after many years of effort.—Yours faithfully,

IAN MACALISTER,  
Secretary.

### VISITS TO BUILDINGS.

The following visits have been arranged by the Art Committee for the current Session:—

1926.—23 Jan. (Saturday): The Second Church of Christ Scientist, Bayswater; The Armenian Church, Kensington.

20 Feb. (Saturday): Messrs. Courtauld's New Premises.

20 March (Saturday): Devonshire House Buildings: (1) Piccadilly Building; (2) Messrs. Cook and Son's New Premises.

10 April (Saturday): \*Chiswick House.

1 May (Saturday): Stowe School, Bucks.

\*N.B.—It will be necessary to limit the numbers for these visits. In these cases tickets will be balloted for if the number of applications exceeds the limit prescribed by the proprietors or their agents.

### CAMBRIDGE UNIVERSITY.

#### ARCHITECTURE UNDER THE NEW STATUTES.

The University Commissioners have recommended a Faculty of Fine Arts in the University and have decided that Architecture shall be a Department under this Faculty.

#### A.B.S. SCHEME OF INSURANCE.

The A.B.S. specialises in Life Assurance. In Whole Life Assurance the sum assured and bonus are payable at death and the payment of premiums normally continues throughout life. The bonuses which are usually payable with the sum assured may be surrendered for cash, applied to the reduction of future premiums or used to reduce the period over which premiums are payable. The Society is not tied to any insurance office and is prepared to offer and advise upon a wide choice of policies in leading companies. Half the initial commission is returned to the assured in the form of rebate and the other half forms a direct contribution to the Society's funds.

Please address all enquiries to the Secretary, Architects' Benevolent Society, 9 Conduit Street, W.1. Telephone: Mayfair 434.



LEGAL.

ATKINSON AND LONG v. WELLBROOK SANITARY LAUNDRY CO.

This case, tried before Mr. Justice Branson, at the Royal Courts of Justice, on 9, 10, and 11 November last, was a claim by Mr. Long [*F.*] for architects' fees amounting to £398 13s. 10d. for abandoned work, the extension of the defendant's laundry. The defendants denied liability, and counterclaimed £174 11s., quantity surveyors fees they had been obliged to pay and damages.

The issue turned on whether Mr. Long's approximate estimate of £5,000, in March, 1923, based on a ground plan prepared by a Mr. Neame, a laundry expert, was the limit of expenditure within which he had agreed to produce plans, and obtain tenders for the required extension.

Evidence was given of many additions that were made from time to time to the original scheme, until the drawings were finally approved in May, 1923, incorporating these additions, and Mr. Long was instructed to obtain competitive tenders. Mr. Long completed the contract drawings, and instructed a firm of quantity surveyors to prepare the quantities and in June, the defendants imposed conditions not previously contemplated, under which the work had to be carried out. Tenders were received in July, the lowest being £7,383. About this time, Mr. Long sent his clients the R.I.B.A. scale of fees. In August, the defendants informed Mr. Long that they had decided to abandon the project, as the cost was prohibitive.

Mr. Justice Branson, in his judgment, said "it seems to me to be perfectly plain upon the documents that I must accept Mr. Long's version of the verbal discussions which took place between them, and it follows that the defendants fail to establish that there was any limit of £5,000 imposed upon the building which Mr. Long's plans were to involve, and, consequently, he is entitled to succeed." The only comment which is now made upon the exact figure is that it is said that the scale fee of £350 includes time charged for surveying the existing premises, and preparing plans for the work. In my view, it does not. Judgment must be entered for the plaintiffs for £398 13s. 10d. with costs, and the counterclaim must be dismissed with costs." Mr. Justice Branson further decided that the plans remained the property of the architect, adding "if the plans are going to be put into execution, then they ought to pay Mr. Long, not the two thirds (of 7½ per cent. on the lowest tender) for which I have given judgment, but his full fee."

The above case shows the importance of acquainting the client with the R.I.B.A. scale of fees.

J. DOUGLAS SCOTT [*A.*].

BOARD OF ARCHITECTURAL EDUCATION.

FACILITIES FOR ARCHITECTURAL EDUCATION AND INSTRUCTION IN BUILDING CONSTRUCTION.

The Board of Architectural Education have appointed a special sub-committee to view and report upon the existing facilities for architectural education and instruction in building construction in institutions other than those exempted from the R.I.B.A. examinations.

This special sub-committee is now considering the

possibility of the development of existing facilities and of the provision of facilities where none at present exist.

The sub-committee will be glad to receive suggestions or criticisms from those who are specially interested, together with any information as to existing facilities, stating, if possible, the number of professional students of architecture in attendance at any institution named.

Notices

THE FIFTH GENERAL MEETING.

The Fifth General Meeting (Ordinary) of the Session 1925-26, will be held on Monday, 4 January 1926, at 8 p.m., for the following purposes :—

To read the Minutes of the General Meeting (Ordinary) held on 14 December 1925 ; formally to admit members attending for the first time since their election or transfer.

To read the following Papers : "Lincoln Cathedral," by Sir Charles A. Nicholson, Bart., M.A.Oxon. [*F.*], and Sir Francis Fox, J.P. [*Hon. Associate*].

ELECTION OF MEMBERS.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that, if they wish to take advantage of the election to take place on 29 March 1926, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than 2 January 1926.

LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, clause 4 (*b*) and (*cii*), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

The following announcements are published by the Council on the recommendation of the Practice Standing Committee :—

MEMBERS OF THE R.I.B.A. AND PUBLIC APPOINTMENTS.

Members are advised by the Council not to apply for salaried public appointments unless the amount of the salary is definitely stated in the announcement which invites applications.

INSURANCE OF CLERKS OF WORKS.

Members are advised to recommend their clients to insure the Clerk of Works against accidents occurring whilst engaged in his duties, as in such cases the liability of compensating him or his dependants, in the event of his death, would, in certain circumstances, fall upon the client.

The Clerk of Works is entitled to claim against his employer for compensation under the Workmen's Compensation Act, if his remuneration does not exceed £350 in any one year. If it exceeds that sum, he would still be entitled to claim under common law.

A policy of insurance can be effected to cover the risks involved, and the amount of the premium can be ascertained from insurance offices.

## ELECTION OF MEMBERS.

15 FEBRUARY, 1926.

The following applications for election have been received. Notice of any objection or other communication respecting the candidates must be sent to the Secretary for submission to the Council prior to Monday, 18th January, 1926.

## AS FELLOWS (19).

ALLCOCK: EDWARD THOMAS [A. 1896], 12, Baxter Gate, Loughborough; Ashfield, Ashby Road, Loughborough.  
 FREAD: HORACE CHARLES [A. 1905], Portsmouth Road, Esher; Millmead, Lower Green, Esher.

GOLD: HUGH ANDREW, M.C. [A. 1913], 14, Bedford Row, W.C.1; 31, Christchurch Road, Streatham Hill, S.W.2.

GOLDSMITH: MAJOR GEORGE HARTLEY, M.C. [A. 1907], Headquarters, Imperial War Graves Commission, St. Omer, France; "Odstone," Rhos-on-Sea, North Wales.

HAMPSON: JOSEPH LOUIS [A. 1910], 10, Richmond Terrace, Blackburn; 360, St. Helen's Road, Bolton.

HUGHES: THOMAS HAROLD, A.R.C.A. (Arch. London), F.S.I., F.R.G.S. [A. 1911], 167, Renfrew Street, Glasgow; 27, Ashton Road, Glasgow.

NEWNUM: ERIC GEORGE [A. 1910], State Buildings Department, Ministry of Public Works, Cairo; 1, Sharia el Walda, Kasr el Doubara, Cairo, Egypt.

ROBERTSON: ALEXANDER ROBERT [A. 1902], 91, Brick Lane, E.1; "Nutbourne," Leigh Cliff Road, Leigh-on-Sea, Essex.

SCOTT: ERIC WILFRID BONING [A. 1912], 24, Castle Meadow, Norwich; Hill Cottage, Harvey Lane, Thorpe St. Andrew, Norwich.

SCOTT: THEODORE GILBERT, M.C. [A. 1914], 24, Castle Meadow, Norwich; Littlewood, Harvey Lane, Thorpe St. Andrew, Norwich.

TAIT: THOMAS SMITH [A. 1913], 1, Montague Place, Bedford Square, W.C.; 48, Rotherwick Road, Golders Green, N.W.11.

TAYLOR: SAMUEL POINTON [A. 1908], Ministry of Health, Whitehall, S.W.; 62, Roxeth Hill, Harrow-on-the-Hill.

TETLEY: CHARLES REGINALD [A. 1913], 240, Beaver Hall Hill, Montreal; 4,291, Montrose Avenue, Westmount, P.Q., Canada.

WESTWOOD: PERCY JAMES [A. 1904], 7 and 8, Adam Street, Adelphi, W.C.2; "Nutfield," Weybridge, Surrey.

*And the following Licentiate, who are qualified under Section IV, Clause C (ii), of the Supplemental Charter of 1925:—*

ANDERSON: ARTHUR ERNEST, 3,299, St. Adele Avenue, Montreal, P.Q., Canada.

FINLAYSON: WILLIAM, Strathearn Lodge, Crieff, Perthshire.

HALLAM: ARTHUR HENRY, Denbigh Chambers, Bowling Green Street, Leicester; "Bodweni," Knighton Church Road, Leicester.

PRITCHETT: HERBERT DEWES, 12, High Row, Darlington; 9, Elton Parade, Darlington.

*And the following Licentiate, who has passed the qualifying examination:—*

CLELAND: JOHN STOCKWIN, M.B.E., Chief Government Architect, Union of South Africa, Public Works Department, Union Buildings, Pretoria, South Africa.

## AS ASSOCIATES (6).

ALI: S. AZIZ [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], New Lane, Hyderabad, Deccan, India.

ALSO: GEORGE HATHERLEY [Final], 29, Thornton Street, Kew, Melbourne, Australia.

BARNES: THOMAS SCOTT [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Morden Lodge, Morden, Surrey.

BHUTA: GOPALJI MULJI [Final], c/o Messrs. Gregson, Batley and King, Chartered Bank Building, Fort Bombay, India.

MEIKLE: EDYTH [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 27, Parliament Hill, Hampstead, N.W.3.

SILCOCK: FRANCES THELMA [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], The Cross, Huyton, Liverpool.

## AS HON. FELLOW (1).

DICKSEE: SIR FRANK, P.R.A., 3, Greville Place, N.W.6.

## AS HON. ASSOCIATE (1).

GRIGGS: FREDERICK LANDSEER MAUR, A.R.A., Campden, Gloucestershire.

## Competitions

## BLACKPOOL MEMORIAL CLOCK TOWER.

The Corporation of Blackpool invite competitive designs for a Clock Tower with drinking fountain, to be erected in the new park. Assessor, Mr. E. Bertram Kirby, O.B.E. [F]. Designs to be sent in not later than Saturday, 13 February 1926. Conditions may be obtained from The Town Clerk, Town Hall, Blackpool, by depositing £1 1s., which will be returnable if a *bona fide* design has been submitted.

## NEWCASTLE POLICE AND FIRE BRIGADE STATION.

First Premium (£500) awarded to Messrs. Ivor Jones and Percy Thomas, 6 and 7, St. John's Square, Cardiff.

## MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

## PROPOSED NEW PARISH CHURCH, NEWBRIDGE, MONMOUTHSHIRE.

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members are advised to take no part in the competition.

## PROPOSED NEW SCHOOL, GOSPORT.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.



### COMPETITION FOR LARGER OFFICES. WEST BROMWICH PERMANENT BENEFIT BUILDING SOCIETY

The President of the Royal Institute of British Architects has nominated Mr. W. Alexander Harvey, F.R.I.B.A., as assessor in this competition.

### TOPSHAM PUBLIC HALL COMPETITION.

Premiums of £50, £40 and £30 respectively are offered in the above competition. Assessor, Mr. Walter Cave [F.] Last day for questions, 1 January 1926. Designs to be sent in by 1 April 1926. Conditions may be obtained from the Clerk to the Parish Council, Topsham, by depositing £1 is.

### BIRKENHEAD NEW ART GALLERY COMPETITION.

Proposed new Art Gallery and Museum, Birkenhead. Premiums offered £250, £175 and £100 respectively. Assessor, Sir Robert Lorimer, A.R.A., R.S.A. [F.]. Competition restricted to competitors practising as architects and being resident, or having an office within twenty miles of the Birkenhead Town Hall for the twelve months at least prior to 1 January 1924. Conditions may be obtained from E. W. Tame, Town Clerk, Birkenhead, by depositing £2 2s.

### GUISBOROUGH PROPOSED NEW HOSPITAL.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

### INTERNATIONAL COMPETITION.

The Fédération Internationale du Bâtiment et des Travaux Publics are organising an International Competition with a view to promoting and facilitating the construction of houses for the middle classes and intellectual workers. Prizes to the value of 500 dollars, 300 dollars and 200 dollars are being offered by Mr. Willard Reed Messenger, engineer, of New York, for a memorandum, either in English or French, not exceeding 5,000 words, accompanied by sketches. Particulars of the competition have been deposited with the Secretary R.I.B.A. and can be obtained on application to him at No. 9 Conduit Street, London, W.

### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

### LEAGUE OF NATIONS.

#### COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

### THE NEW INSTITUTE FOR THE BLIND, BUENOS AIRES, ARGENTINE REPUBLIC.

An International Competition has been promoted for the Argentine Institution for the Blind, Buenos Aires, Argentine Republic.

A small number of copies of the conditions have been deposited in the R.I.B.A. Library for the information of British Architects who may desire to compete.

A booklet containing the full text of the conditions with other information (translated from the Spanish) and a plan of the ground on which the Institution is to be erected is available for inspection at the Department of Overseas Trade (Room 42), 35 Old Queen Street, London, S.W.1.

### PROPOSED NEW COLLEGE BUILDINGS, LIVERPOOL COLLEGE.

Proposed new College Buildings to be erected on a site in Queen's Drive, Mossley Hill, Liverpool. Assessor, Sir Giles Gilbert Scott, R.A. Premiums £500, £300 and £200 are offered. Last day for questions, 30 September 1925. Conditions may be obtained by depositing £2 2s. Designs to be sent in not later than 1 January 1926.

### AUSTRALIAN WAR MEMORIAL—CANBERRA.

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon,

on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

#### PROPOSED BRANCH LIBRARY FOR GABALFA.

Proposed branch library to be built on a site in St. Athan Road, Gabalfa. Assessor, Mr. Sidney K. Greenslade [F.]. Premiums, £75, £50 and £30 are offered. Last day for questions, 7 December 1925. Designs to be sent in not later than 12 noon on 16 January 1926. The competition is limited to properly qualified architects within the City of Cardiff. Conditions may be obtained from Harry Farr, Librarian, Central Library, Cardiff, by depositing £2 2s.

## Members' Column

#### PRACTICE FOR SALE.

ARCHITECT, F.R.I.B.A., with an old-established practice in Westminster, for health reasons solely, is prepared to dispose of practice, with office and effects, to a good qualified man, at a low price for an early settlement. Introductory and advisory assistance given for the next twelve months or longer by arrangement. Full particulars supplied at personal interview only.—Box No. 8125, c/o Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

#### APPOINTMENT WANTED.

PARTNERSHIP or Practice required by Associate with capital.—Apply Box 1512, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

## Minutes IV

#### SESSION 1925-1926.

At the Fourth General Meeting (Ordinary) of the Session 1925-1926, held on Monday, 14 December 1925, Mr. E. Guy Dawber, F.S.A., President, in the Chair. The attendance book was signed by 27 Fellows (including 12 members of the Council), 12 Associates (including 4 members of the Council), 5 Licentiates (including 1 member of the Council), 2 Honorary Associates and a large number of visitors.

The minutes of the meeting held on 30 November 1925 having been taken as read, were confirmed and signed by the President. The Hon. Secretary announced the decease of:

Mr. Ernest Sewell Gale, elected Fellow 1921.

Mr. William Henry Harrison, elected Fellow 1889.

Mr. Edmund Livingstone Wratten, elected Associate 1902, Fellow 1925.

Mr. Charles Archibald Daubney, elected Associate 1900, Fellow 1921, Godwin Bursar 1902. Mr. Daubney was a member of the Science Standing Committee from 1919 to 1923, the Practice Standing Committee for Session 1924-25, and the R.I.B.A. London Building Acts Committee from 1920 to the present time. He was elected Hon. Secretary of this Committee in 1923 and held the position up to the time of his decease.

Mr. Arthur Benjamin Plummer, J.P., elected Associate 1881, Fellow 1889, and placed on Retired List in 1921. Mr. Plummer was a Past-President of the Northern Architectural Association and represented that body on the R.I.B.A. Council during the Session 1907-1908. Prior to his Presidency Mr. Plummer was for 14 years Hon. Secretary of the Northern Architectural Association.

Mr. Edward Garlick, elected Licentiate 1912.

And it was resolved that the regrets of the Royal Institute for the loss of these members be recorded in the Minutes.

The following members attending for the first time since their election or transfer were formally admitted by the President:—

C. E. Blackburn [F.].

W. Glen Dobie [F.].

L. H. MacKelcken [L.].

A. H. M. Brice [*Hon. Assoc.*].

Mr. Herbert A. Welch [F.], having read a paper on "The Condition of the Building Industry with special regard to the shortage of skilled labour and the increased cost of work," a discussion ensued, and on the motion of Major Harry Barnes [F.] Vice-President, seconded by Mr. W. H. Nicholls, Past-President of the National Federation of Building Trades' Employers and Mr. R. Coppock, General Secretary of the National Federation of Building Trades' Operatives, a vote of thanks was passed to Mr. Welch by acclamation, and was briefly responded to. The meeting closed at 10.30 p.m.

At a Special General Meeting of the Session 1925-1926, held on Monday, 14 December 1925, immediately after the Ordinary Meeting above recorded and similarly constituted, with the exception of the guests who had been requested to retire, the President announced that the meeting had been summoned for the purpose confirming the following resolution passed by the requisite majority at a Business Meeting held on Monday, 30 November 1925:—

That Bye-law 25 be amended as follows, and that the necessary steps be taken to obtain the sanction of the Privy Council to such amendment of Bye-law 25 as is required to give effect to this resolution.

"25.—Any Charge under the preceding Bye-law 24 must be preferred in writing and signed and forwarded to the Secretary, who shall lay it before the . . ." etc., as printed down to " . . . such record and publication."

"During the period of suspension the member shall not be entitled to use the title 'Chartered Architect' or the affix of the class to which he belongs, nor shall he be entitled to the use of the Library, attendance at Institute Meetings or right of voting, and his name shall not be printed in the list of members in the *Kalendar* during the period of his suspension and he shall return his Diploma for such period. Before any member so suspended is reinstated the Council shall consider any further complaints as to his professional conduct during his period of suspension, and if not deemed satisfactory may decree a further period of suspension or his expulsion, in either case the above procedure of announcement and publication shall again be followed."

The confirming resolution was moved from the chair, and passed by a unanimous vote.

The Special General Meeting terminated at 10.35 p.m.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

#### R.I.B.A. JOURNAL.

*Dates of Publication.*—1925: 7th, 21st November; 5th, 19th December. 1926: 9th, 23rd January; 6th, 20th February; 6th, 20th March; 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

THIRD SERIES

VOL. XXXIII. No. 5

9 JANUARY 1926

## Contents for 9 January 1926

	Page
DRAWING by G. Galli da Bibiena .. .. .	<i>To face</i> 123
THE CONDITION OF THE BUILDING INDUSTRY. By Herbert A. Welch .. .. .	123
Discussion .. .. .	134
REVIEW :	
The Dome of the Rock in Jerusalem. By William Harvey .. .. .	141
WATERLOO BRIDGE : REPORT OF L.C.C. MEETING. By Ronald P. Jones .. .. .	142
Letters by the President and Mr. E. Stanley Hall .. .. .	144
CORRESPONDENCE :	
R.I.B.A. Forms of Contract. By Edmund W. Wimperis .. .. .	144
THE ARTERIAL ROADS OF GREATER LONDON. Visit by the Town Planning and Art Committees. By W. Harding Thompson	145
OBITUARY :	
Leonard Aloysius Scott Stokes. Reminiscences by Walter J. N. Millard and George Drysdale .. .. .	148-9
C. A. Daubney .. .. .	151
ANNUAL COMPETITION OF INDUSTRIAL DESIGNS .. .. .	150
ARTS AND CRAFTS EXHIBITION .. .. .	150
TOWN PLANNING SCHEMES .. .. .	151
WAGES SLIPS ON TENDERS .. .. .	151
NOTES FROM THE MINUTES OF COUNCIL .. .. .	152
EXAMINATIONS .. .. .	151, 153
NOTICES .. .. .	153
COMPETITIONS .. .. .	154
MEMBERS' COLUMN .. .. .	156
MINUTES .. .. .	156



FROM AN ORIGINAL DRAWING BY GIUSEPPE GALLI DA BIBIENA  
From the R.I.B.A. Collection





## The Condition of the Building Industry

With Especial Regard to the Shortage of Skilled Labour and the Increased Cost of Building Work

BY HERBERT A. WELCH [F].

[Read before the Royal Institute of British Architects on Monday, 14 December 1925].

ON one previous occasion only I think—at least during recent years—has the Council of this Institute considered it opportune that its members and other parties interested should, within these walls, be given an opportunity to focus their attention upon a matter having for its purpose a general survey of the condition of the building industry, with a view to determine whether the existing difficulties with which the industry is beset can be overcome to the lasting satisfaction of all concerned.

To this end I might express the hope that out of the multitude of counsels gathered here to-night will come wisdom.

Within the scope of a single paper it might be wearisome for you were I to attempt more than to touch upon many of the contributing causes to the present position. For this reason I shall concern myself chiefly with the *main* causes and effects.

Resulting from my investigations, I have formed the opinion that the chronic troubles from which the industry has suffered during recent years are not so much due to particular incidents or disputes, to special points of difference between the parties regarding what might at such times appear to be the cause for such disputes, as to the fact that there is underlying these disputes a deeply rooted feeling

(frequently shared by both masters and men) that hardships and grievances are permitted to continue because no sufficient attempt has been made in the past to tackle fundamental conditions. On this account many of the so-called settlements of past disputes have in effect been merely a postponement of the matter until such time as one side or the other considered the occasion most favourable to its cause. The result has been that for a long time “feeling”—active or latent—has manifested itself within the industry. In such cases delay has not healed the wound but, on the contrary, has caused it to fester with a tendency to become poisonous.

It is no new expression of opinion that “conditions in the industry are worse to-day than ever they were”—even the youngest of us have heard it before. We have to-night to consider whether or not there exists any foundation for that statement. If there is, it behoves us to examine all constructive proposals put forward which have for their object the betterment of these conditions. The existing agreements between the employers and employees expire in February of next year. It would seem, therefore, that now is the opportune time to give calm, quiet and deliberate thought to our subject. For some time past there has been an expressed desire for “a new spirit in industry”

generally. Can we continue to view with complacent satisfaction this growing desire without ourselves making a serious attempt to encourage this new spirit within the industry with which we are connected? I think not.

This question of "a new spirit in industry" is not a new one—indeed, it is very old—but it claims our attention on new ground. It is a question of business, not of sentiment. It has been forced to the front by the economic situation of the country, especially in regard to foreign competition and export trade, which has compelled a general recognition of the need of more efficient—that is, economically efficient—production, and of industrial peace as an indispensable condition for securing it. Probably no one will deny that economic recovery is dependent on those conditions; but at that point opinions begin to diverge, and they separate, as usual, into two extremes with a middle section between them. On what we may call the extreme right there are employers of the old school who hold that if only trade unionism is kept in its place and they are allowed to run their businesses as they please, all will be well. On the extreme left are those who call the present economic situation the breakdown or collapse of Capitalism, and maintain that nothing less than a complete transformation of the existing order will be of any avail. The policy of the first, if effectively carried out, involves turning back the course of social evolution and reverting to a past order, which is no more possible to-day than the restoration of the feudal system. The policy of the other offers no real remedy. The theory that public ownership and control would inevitably secure the superior economic efficiency that we need is supported by no material or convincing evidence.

There remains the middle course, which is, in effect, the one that at similar times of reconstruction has generally been followed at least in this country—namely, the gradual modification of existing conditions by ameliorative measures. But it is evident that this policy, as hitherto pursued, will not suffice. Something more is needed to promote that effective co-operation of the factors engaged in production which is seen to be necessary. The cry for a new spirit in industry is a recognition of this truth. Such a spirit is a necessary preliminary because it supplies the motive power of action, and without a change of

spirit there can be no real change of form; but it must take a concrete shape to be effective. What shape? That is the practical question. There can be no uniform plan, but there is a uniform principle, which is perhaps expressed by the word "collaboration" as well as by any other. This is an essential condition of all good work done by men in concert. To produce the best result there must be the will to work together for it, and that is not secured by the pressure of circumstances or coercion by authority, but by a common feeling and a common interest. The common feeling depends on the human relationship; the common interest on the economic principle. It cannot be maintained that either has been satisfactory in the past or is at all generally satisfactory now; and this is the reason for what in another industry—as recently as 1919—was called the "psychology of low production." It is a question of motive in industry. A solution of all the other difficulties would be no solution for this one.

The motive is the heart of the problem. For the best work there must be an adequate motive, and it will not be forthcoming without a change both in the human and in the economic relationship. The first concerns personal treatment. Authority and discipline there must be in all concerted operations; but they can be exercised in different ways, as they actually are in different establishments. In some there is incessant trouble, in others none at all. In the former case employers put it all down to agitation (and sometimes that is a principal cause), but more often it is due to someone wielding authority and exercising it in a harsh manner. To be effective the change of attitude must be generally recognised and observed. With regard to the economic relationship, what is needed is such an interest in the prosperity of the business as will induce all those engaged in it to do their best, or at least such a direct reward for effort as will elicit the best. A combination of the two is the most complete solution of the problem. It is in this direction that American industry has taken so marked a lead. Effort is encouraged and interest in the common prosperity secured by commensurate reward.

#### THE GENERAL ORGANISATION FOR THE MANAGEMENT OF THE INDUSTRY.

It has become the custom—by accident, I think rather than by design—for representatives



of the employers and employees alone to deal with matters concerning the more practical and material side of the industry, probably because they represent the parties most directly concerned. So long as the machinery thereby set up has functioned for the general well being of the industry, it might be reasoned that he was a meddling busybody who would venture to introduce changes from the outside. It is a generally accepted axiom that onlookers see most of the game. Were we architects but mere onlookers I venture to think that from that standpoint alone a good and sufficient reason could be stated for our venturing an expression of view as to how best the game might be played. We are, however, not mere onlookers, but active participants in all the good and ill which befalls the industry. Yet how little we know about the causes and effects of certain fundamental conditions, the reasons why disputes arise, tending to acute feeling and sometimes ending in strikes; which, in turn, are settled upon terms of which we know not until at breakfast or in the train we scan our morning newspaper!

We architects—and I would include in these remarks the quantity surveyors also—are, as it were, the third in a group of four—employers, employees, professional men and the community—who are interested in the welfare of the industry. The professional class by virtue of the position it holds is at once concerned with safeguarding the public interests, which interests are in no way inimical to but are in very fact the essential interests of the industry, the prosperity of which in the widest sense is dependent upon its possession of the public confidence. The interests of all parties concerned are therefore fundamentally alike.

To give and to receive the fullest measure of benefit the industry as a whole should be happy and contented, the crafts sound and skilful; production should be smooth, steady and economic.

Can we architects play any useful part in creating such conditions? In the past attempts have been made to this end. These attempts, however, have failed to achieve any great measure of success.

Trying to forget the past, is the time ripe to make a further and this time a successful effort to get together and pull together in an attempt to improve conditions and remove evils which are known to exist?

As a prelude to our own efforts let us consider in

passing what has been the result elsewhere of certain experiments along the lines I have in mind.

Mr. Robert D. Kohn, Chairman of the Committee on Industrial Relations, American Institute of Architects, in a letter to the *Architectural Association Journal* under date 19 June 1925, regarding a report of the Architectural Association's general meeting on 27 April this year, writes as follows:—

“The report of your meeting and the discussion thereon by members of your Association seem to indicate that the situation in England with regard to the relations between architect, building labour, and the builder do not vary greatly from those that pertain in the United States. Here, too, we have until recent years had a series of disagreements between the building crafts workers and their employers, the causes of which were unknown to the architects or ignored by them, and indeed it appeared as if neither party to these controversies wished to recognise the interests of anyone else in either the cause or the result of their quarrel. Sometimes when the situation became serious either labour or the employers would call upon the public to support their just (?) contentions, but as a general rule the disagreements were fought out privately, and sometimes the public interest was totally ignored or sacrificed in the terms of the final settlement.

“In the last few years we have made a beginning towards a change in this procedure. Reference is made in your report to the appearance of Mr. Malcolm Sparks on one occasion before your organisation. We are glad to acknowledge our indebtedness to Mr. Sparks, for the plan of co-operation between the various elements of the building industry upon which we have embarked in the United States was primarily inspired by his efforts to organise the Parliament of the Building Industry in England during the war. As far as I can discover, his war-time effort has left no permanent organisation of similar character in England. It inspired a movement, however, in this country which is carrying on with great success.

“I refer by this to the ‘Congress of the Building Industry’ which was started in 1920 in a preliminary way in this country, and which in the last three years has developed into a group of local organisations in half a dozen of our more populous communities; New York, Boston, Philadelphia, Portland (Oregon), Seattle and the State of New Jersey.

Each of these organisations includes within its membership what we call the technique of the industry (the architects and the engineers), the labour of all the crafts of the industry, the builders (here called general contractors), the sub-contractors, the building material manufacturers or producers; the building material distributors, and finally, the representatives of finance principally interested in building loans.

"We are, therefore, gradually developing here through these local organisations a medium of co-operation between the various elements that jointly render a certain service to the public, and this co-operation enables each different function within the building process better to understand all the other functions within the process. Already each of these local groups has developed a system of apprenticeship training in the building crafts. This enlistment into and training for the industry is one of our most important problems as it is with you. Time and again in different places efforts have been made to start systems of apprenticeship training through either the joint efforts of the labour organisations and employers or by these two groups with the co-operation of the local education boards. Frequently these efforts have failed. Since the Congress of the Building Industry has been formed renewed efforts in this direction have been undertaken under the guidance of the architects and with the co-operation of the other elements previously mentioned as being part of these groups (and with the local education boards).

"Just as an illustration of the results attained in three brief years of work I may cite that in New York City alone the number of apprentices being trained in various crafts has increased from a few hundred to two or three thousand. Here, too, there are restrictions by unions upon the number of apprentices to be introduced into any craft, but the neutral investigations conducted by our 'Congress' groups have shown that, as with you, there were in no trade as many apprentices being trained by the employers as were permitted by the union rules. Nor have we yet, even with our large increase above recorded, reached the maximum permitted by the unions. Time enough to discuss these rules when this limit has been reached. Indeed, it is only fair to say that we frequently find a more ready response from labour in the matter of starting apprenticeship training than we get from the employers.

"Apprenticeship training is only one of the many educational efforts undertaken by the Congress groups, educational in the sense that they educate the participants in the efforts rather more than those ostensibly to be benefited. Seasonal unemployment; unfair practices on the part of builders or of labour; inadequate performance on the part of the architects; industry codes of ethics; surveys of likely shortages of materials or labour, are all topics that engage various Congress committees in the different cities.

"It must not be supposed that what we have done here has been all plain sailing or that we have solved the problem of industrial relations in the building industry in the United States. We have hardly scratched the surface of the problem. But we are certain we have started in the right direction. The fundamental principle announced in the declaration of purpose of each of these Congress groups is that the object to be attained is the study of the functioning of the building industry through the joint effort of all of the elements that are necessary to the industry so that the mistakes and the difficulties may be done away with that lie in the way of an adequate service of the industry to the public.

"I hesitate somewhat to impose upon your time this statement of an experiment which is after all only in its beginnings. By doing so can only be justified by two facts. One is that after all the inspiration for this move came from one of your own war-time experiments, and the other is that the results of our three or four years' effort have already proven that this scheme of building industry organisation in which the architects have taken a hand has produced what we may call a by-product even more important than apprenticeship training, the doing away with seasonal unemployment and the correction of unfair practices within the building industry. This more important thing which has been accomplished, and which is recognised by hundreds of architect members of these Congress groups, is that the work done jointly on these various committees by architect, engineers, labour men, building trades employers and others interested in building work has established between the individuals thus working together an understanding of and a sympathy with each other's problems, of the functioning of the industry as a whole and of the relation of any one part to the whole, which unquestionably will result in a willingness to be



more reasonable when those difficulties arise. This realisation of a common purpose is in itself the most important thing that we think we have accomplished. It is the recognition of the fact that the architect needs this kind of education as much as anyone else that has caused the American Institute of Architects to instruct the committee of which I happen to be chairman to encourage its members to invite the co-operation of others in the building industry to help in the formation of 'Congress' groups, such as I have described, in every part of the country."

I cannot help feeling that if possessed of "the will to win," a similar body set up in this country could and would do much excellent work. I further feel that unless some such body is created, and *can be made to work in the right spirit*, we must be prepared to face in the future continued trouble and controversy.

I cannot speak for my friends the Quantity Surveyors, but I believe I am expressing the views of many members of this Institute when I say that we now are, as we have always been, ready and willing to play an earnest part in any such movement. Clearly we cannot move alone, nor of our

own initiative, but if an invitation is extended to us by the other interested parties we shall not decline to give of our best to help in a further endeavour to find a way to lasting peace and prosperity in the industry.

We will now pass on to consider the main causes for the difficulties and dissatisfaction within the industry, and at the same time examine a few suggested remedies. These difficulties may comprehensively be grouped under five heads :—

- 1. Shortage of Skilled Labour.
- 2. Casual Nature of Employment.
- 3. Wet Time.
- 4. Output.
- 5. High Costs.

1. The marked shortage of skilled labour has manifested itself mainly since the war—it has, however, been going on since at least 1901—and is at once the direct or indirect cause of many of the other difficulties in the industry. It has caused considerable inconvenience to the building public, who have in consequence been unable to count upon the normal progress of building operations. This has resulted, on the one hand, in the postponement of

TABLE I.\*—SHOWING A COMPARISON IN THE NUMBERS OF CRAFTSMEN EMPLOYED IN THE BUILDING INDUSTRY.  
COMPILED FROM FIGURES EXTRACTED FROM THE CENSUS RETURNS OF 1901, 1911 AND 1921.

Occupation		Number of Males employed in the following Crafts under seven age groups.								Decrease.	
		Under 20	20—24	25—34	35—44	45—54	55—64	Over 64	Total	1911—1921	1901—1921
Bricklayers {	1901	—	—	—	—	—	—	—	115,995	15,315	28,558
	1911	3,850	8,034	31,028	21,993	19,350	13,117	5,380	102,752		
	1921	6,769	4,345	11,721	25,300	18,597	13,786	6,919	87,437		
Masons .. {	1901	—	—	—	—	—	—	—	73,012	16,340	42,289
	1911	2,237	3,646	11,880	9,421	9,528	7,168	3,183	47,063		
	1921	1,646	1,111	3,797	8,106	6,934	5,876	3,253	30,723		
Carpenters and Joiners {	1901	—	—	—	—	—	—	—	270,660	3,070	64,736
	1911	18,604	22,921	53,822	36,754	36,479	26,688	13,727	208,995		
	1921	26,008	16,082	37,001	47,832	33,438	29,025	16,539	205,925		
Plasterers {	1901	—	—	—	—	—	—	—	31,301	5,281	11,500
	1911	1,100	2,130	7,927	4,645	4,759	3,299	1,222	25,082		
	1921	1,646	1,107	2,793	5,888	3,560	3,185	1,622	19,801		
Painters and Decorators {	1901	—	—	—	—	—	—	—	160,201	27,371	5,959
	1911	14,801	19,831	47,618	42,021	32,400	18,441	6,501	181,613		
	1921	12,311	10,905	31,210	36,884	32,755	21,501	8,676	154,242		
Plumbers {	1901	—	—	—	—	—	—	—	64,924	15,849	15,805
	1911	11,634	9,598	17,449	12,353	8,367	4,201	1,366	64,968		
	1921	8,856	4,972	10,742	10,991	7,716	4,326	1,516	49,119		
Total decrease .. .. .										83,226	168,853

\* Compiled by Mr. A. Legge, Organiser, National Federation of Building Trades Employers, from figures extracted from Census returns.

work which might have been undertaken had the industry been better able to tackle it, and, on the other hand, where the speedy erection of business premises has been of vital importance, the ensuing delay caused by protracted building operations has resulted in serious loss of interest upon capital, as well as loss of prospective revenue from the proposed undertaking. The delay caused in making good the shortage of houses is so well known generally that I need not here dilate upon it nor upon its consequent bad effect upon social conditions.

In all cases where the supply of a commodity falls far short of the demand the immediate result is a rise in prices. To so high a level did the prices reach in 1920-2 that building ceased to be an economic proposition except in a few outstanding cases. To some extent costs have since been reduced, but public confidence has not yet been fully restored. While it cannot be held that shortage of labour has been or is the sole cause for this state of affairs, it has nevertheless been a potent factor. Table I (compiled from the census returns) shows under seven age groups a comparison in the number of craftsmen employed in the industry in the years 1901, 1911 and 1921.

In 1924 the Ministry of Labour compiled some statistics for the purpose of the Government's housing scheme (see page 129) representing the number of insured persons in the building trades during the years 1913-1921 and 1924. These figures vary considerably from those shown in Table I. The figures on this table might therefore be considered to include persons registered under the census in the various trades mentioned, many of whom were either not then so employed, or were not then engaged in the building industry.

From Table I it will be seen that there were engaged in the industry in 1921, 168,853 fewer skilled operatives than in 1901, representing a general decrease of about 24 per cent.

The table shows a decrease in the various crafts as follows :

	Decrease.	About per cent.
Bricklayers .. .. .	28,558	24
Masons .. .. .	42,289	61
Carpenters and Joiners ..	64,735	24
Plasterers .. .. .	11,500	34
Painters and Decorators ..	5,959	4
Plumbers .. .. .	15,805	24

These figures appear to indicate that with a decline of 61 per cent. masonry is a comparatively dying craft. This is probably true only so far as the

provinces are concerned. Every observant traveller has during recent years noticed—with feelings of regret—that the use of bricks, roughcast and similar materials, have to a large extent taken the place of stone in many of the districts where hitherto building in stone—at least so far as the external walls were concerned—had been a tradition. The character of these districts is suffering accordingly, and architects might on these two grounds well consider the desirability of making every effort towards a rebirth of this craft. In London it is probable that stone is as much in use as previously.

The plastering craft, with a decrease of 11,500 operatives—representing an average of 34 per cent.—is to-day clearly much below economic strength. Shortage in this craft is having a detrimental effect upon the industry generally by delaying normal progress not only so far as plastering work is concerned, but by the resultant delays and disorganisation which inevitably affect the other trades following in its wake. It would appear that this craft is badly in need of additional apprentices with a view to increasing the number of operatives. In the meantime the industry would be helped if as a temporary measure—say, for one year—longer hours were worked in this craft. It behoves the responsible parties to use every effort to bring the craft up to the requisite standard on at least two grounds (a) that until normal progress can be made with this section of the work joiners, painters, plumbers, and general finishing crafts must inevitably suffer inconvenience and ultimately a measure of unemployment; (b) that if no other remedy is forthcoming in due course the market demand for the commodity will be met by the development in various forms of substitutes both in men and materials, some of which are already making their presence felt.

The bricklaying, carpentering and plumbing crafts show a decline of 25 and 24 per cent. respectively. The effect of the shortage is most marked in the bricklaying craft, which operates detrimentally in the same manner as I have endeavoured to indicate in regard to plastering, but to a greater degree, inasmuch as this craft operates in the *earliest* stages of building work and the progress of a greater number of "following" crafts is thereby hindered.

In addition, there is another aspect of this question of shortage which must be noted. A reference to the age groups in Table I goes to show that, side



by side with a decrease of 83,226 skilled workers in the industry between the years 1911 and 1921, there appears during the same period an increase of 7,146 (about 23 per cent.) in the number of skilled workers over the age of 64 years. From the figures above quoted and from those included under the age group, 55 to 64 years, there emerges one very clear indication : that wastage during the next five to 10 years must inevitably be high.

TABLE II.—COMPILED BY MINISTRY OF LABOUR IN 1924.  
Showing the number of *insured* persons in each trade at the dates mentioned.

	December 1913	October 1921	January 1924	Decrease 1913-1924	
Carpenters	126,780	132,260	125,010	1,770	1'5%
Bricklayers	68,920	62,170	57,170	11,750	17%
Masons ..	38,870	23,880	22,270	16,600	42%
Slaters ..	6,650	5,370	5,210	1,440	23%
Plasterers	20,180	17,080	16,070	4,110	20%
Painters ..	130,860	115,900	106,860	24,000	18%
Plumbers..	36,860	35,840	34,440	2,420	7%
Totals	429,120	392,500	367,030	62,090	

It will be seen that these figures vary considerably from those given in Table I. The general conclusions drawn from the latter table, however, apply also in principle to the above table, but the totals and percentages would be different.

In connection with these figures it must also be borne in mind that the hours now worked—45 per week, compared to 1914, 53 per week—shows a fall of 15 per cent. in hours worked.

I think I have produced sufficient evidence to show the extent of the shortage of skilled craftsmen in the industry generally and that this falling off has been going on steadily since at least the census of 1901. Further investigations are necessary to discover the causes before we apply ourselves to solutions. For instance, we find that the falling off has not affected the whole country in the same manner. Until recent years—say the past ten to fifteen years—London and the other large cities were able to count upon a steady supply of the right kind of craftsman from the less populated centres in the provinces, satisfactorily to fill a large proportion of the normal vacancies occurring in the industry. Owing to a variety of reasons—among which are emigration and the general levelling up of rates of wages in the graded provincial areas—this source of supply has during recent years shown so marked a falling off that it can now practically be ignored in our consideration of the problem of the shortage of skilled craftsmen in the large cities. For all prac-

tical purposes, therefore, we might now consider the industry to be similarly affected throughout the country.

A general survey of the prospective supply of labour goes to show that in London, at least, there are more boys who wish to enter the industry than there are available vacancies, whereas in the provinces generally the reverse appears to be the case.

Where the supply of prospective labour is short the principal reasons given why young men do not enter the industry are stated to be as follows :

1. The Casual Nature of Employment.
2. The Comparatively Low Level of *Net* Wages (having regard to time lost during the year owing to the casual nature of employment, insecurity of tenure, " wet time," and other causes.
3. The Small Increase of Wages of Skilled Men over the Wages Paid to Unskilled Workers, and to the relatively high wages obtainable by unskilled boys in what might be termed " blind alley " occupations.

4. National Unemployment Pay for Persons under 21 Years of Age.

5. The Supposed Social Inferiority of Workers in Manual Trades Generally. (This is accentuated by the tendency of elementary school masters to encourage boys to enter clerical occupations with a view to indicate the high social standard of the school.)

All of these objections can with co-operation and determination be mitigated or overcome.

In an attempt to discover the most satisfactory solution to the problem of shortage of skilled labour (with which is closely allied the general improvement of conditions within the industry) five possible methods of entry into the industry might be examined.

1. Apprenticeship to a Building Trade Employer.
2. Tuition in a Trade School, including indentures.
3. Over Age Apprenticeship.
4. Promotion from Labourers.
5. Dilution.

Of these five methods Nos. 1 and 2 appear to offer the most satisfactory means whereby the shortage can be overtaken.

The fullest possible development of the apprenticeship system, together with that of training in technical schools, is both urgent and vital if the existing

shortage is to be supplemented by bringing into the industry the right type of young man. From the examination of much data I have formed the opinion that hitherto the system of apprenticeship has not been developed to nearly its full extent.

At the present time there exists between the employers and employees an arrangement by which no employer may engage apprentices in any craft in excess of one to seven of the journeymen employed by him, with a maximum of eight apprentices in each craft. To the credit of the parties to the agreement it should be stated that this limitation has not been too rigidly observed, or the position to-day would be worse than we find it. Yet whereas in certain cases a greater proportion of apprentices has been agreed to at the instigation of certain firms—in consequence of which a greater number of apprentices are now being trained than probably at any time during recent years—there exists, nevertheless, a real difficulty in obtaining in sufficient numbers lads to follow the various trade crafts in the industry, with the single exception of the carpentering and joinery craft. So far as can be ascertained there are at present in London about 800 lads serving the usual five years apprenticeship course in the various crafts, 160 of whom (on average) will be available each year as journeymen. In addition there are about the same number of improvers, mainly boys without indentures and others, who are suffering some measure of disability. In addition there are in the various trade schools about 140 to 160 lads being trained for a period of three years. This, on an average, would indicate a total number of about 370 young journeymen likely to enter the various crafts in the London area each year. The wastage from various causes I have computed to be at least 800 to 1,000 journeymen each year. It will therefore be seen that at the present rate about 33 per cent. only of the normal vacancies in London can be filled by apprentices now being trained.

In order to increase the number of apprentices with a view to overtaking the existing shortage of labour, it would, I think, be well to consider—at least for a stated period of, say, 5 years—(a) the advisability of amending the existing rules in order that individual firms might take an unlimited number of apprentices, provided the agreed ratio of apprentices to journeymen (1 to 7) was not thereby exceeded; (b) That the Employers' Federation should bring to the notice of its members in par-

ticular and to the industry in general the vital necessity of encouraging the apprenticeship system by urging master builders to train a greater number of young men in the various crafts, in particular those crafts in which from time to time the shortage of skilled workers is most marked; (c) That the notice of the Elementary School Authorities be drawn to the prospects in the industry for young lads when nearing the age for leaving school. In this direction stimulus might be provided if suitable propaganda work were undertaken in important centres of population; (d) That greater encouragement be given to apprentices to supplement the knowledge gained by them in the workshops and on the jobs by attendance at technical schools at least on certain evenings each week, and if possible one whole day per week during, say, the three or four years of their apprenticeship. It is generally acknowledged that operatives who have received technical school training in addition to working in the shops and on the job become far better fitted ultimately to occupy the positions of foremen, clerks of works and master builders. To this end added encouragement would be given if the Federations of Employers and Employees could see their way to grant a suitable sum for prizes and scholarships to students at recognised schools. I would add that in the event of the Federations adopting some such scheme perhaps the Council of the R.I.B.A. might consider the desirability of associating itself with such an educational project. In cases where an apprentice showed marked ability and progress as a result of supplementing workshop training with technical school study, his period of apprenticeship might be accordingly reduced; (e) That wages paid to apprentices should not bear unfavourable comparison with those obtainable by lads in unskilled trades.

The desire for a general improvement in the status of the industry I have already dealt with.

(3) Over age apprenticeship has, I believe, had some measure of consideration as a temporary means of providing additional craftsmen. By this method the prospective craftsman would be bound under a form of indenture providing for a minimum period of three years training. Of this period it appears to be advisable that one year at least should be spent in a trade school, where a curriculum suited to this special section should be applied. Owing to the comparatively high age—say 19–25 years—for the commencement of such indentures,



some system of payment by grant would be necessary, and this might involve a difficulty not easy to overcome, especially in view of the comparatively small numbers of craftsmen likely to be produced by such an arrangement.

(4) and (5). Promotion from Labourers and Dilution.—This is a scheme for increasing the number of craftsmen in the industry by introducing into the ranks of the skilled craftsmen a number of semi-skilled men, thereby creating additional numbers of so-called skilled workers, many of whom are not necessarily capable of executing a high standard of work. Its advocates hold that there are many operations in building works which can successfully be carried through after comparatively short training. Its opponents state that to employ upon building works men who are not well skilled in their job tends seriously to reduce not only the level of output, but also the general quality of the work. If such a scheme were adopted on anything approaching a big scale I fear that the dilutees would fail to get general employment on account (a) of the established tradition for a high standard of workmanship in the industry, (b) the disinclination of architects to produce a specification of works on a lower standard than that to which they are accustomed, and (c) the comparative failure of the scheme of dilution for ex-service men put into operation a few years ago.

## (2) CASUAL NATURE OF EMPLOYMENT.

I think it will generally be agreed that, broadly speaking, a "casual labour" industry is an unhealthy and troubled industry. This was admittedly so in the past when, in relation to existing standards, the workers possessed a lower educational equipment and were less organised than at present.

The main evils of casual labour are uncertainty and waste of time and effort. Whatever may be the rate of wages ruling there is no certainty—on the contrary there is a grave uncertainty—that the operative will over any future period be given an opportunity to earn these wages. For the majority of men employed there is no reasonable security of continuous employment under the same employer. On the other hand, in the course of securing employment there is a constantly recurring waste of time and effort, not to mention needless expenditure upon travelling fares, meals and the like, and, most important of all, loss of morale. Nothing is

more demoralising to the average human being than the uncertainty of employment. Can it be that these conditions must in their old form continue to exist? It may be that owing to fluctuations in the public demand for our commodity these evils will never be entirely eradicated; were we, however, to concentrate upon a solution to this vexed question the evil might, I think, be considerably reduced.

One or two suggestions occur to me as being perhaps worthy of consideration:—

(a) Could not a building trade employment bureau be set up in all large centres of population whereby employers seeking men and operatives seeking employment could obtain mutual advantages? Surely it would be more economically sound if employers or their foreman on the one hand were able to notify such an establishment of their labour wants, say, two or three days ahead, with a view to avoiding delay and to secure the more satisfactory dovetailing together of the work of the various trades! On the other hand the operatives should welcome the opportunity thereby offered in being enabled to discover at a central bureau—especially managed by the industry for the industry—the employers who at that time are wanting men, and so save time and avoid the disappointment so often now in store when walking from job to job in search of work. I gather that the headquarters of the men's Unions have attempted some such arrangement, but owing to various causes the fullest use is not made of such arrangements as exist, nor do the existing arrangements appear to be capable of development along lines which are likely to be used to the full by the parties concerned. Existing labour bureaus are not popular with either masters or men, and owing to their general nature could never impress the industry with the same degree of confidence as its own show.

(b) It has become a custom with the public to view with favour the early spring for carrying out all kinds of decorations and jobbing work. These seasonal operations need adjustment in the interests alike of the public and the industry. How often do we find householders and others delaying until the spring such operations as external painting and similar work when a glance at the condition of the woodwork, &c., clearly indicates that the materials will badly deteriorate as the result of such delay? Two coats of paint applied to bare woodwork in

the autumn is as good as four coats in the spring after the winter rains, snow and frost have done their worst. Help and advice to the public regarding seasonal operations is capable of considerable development. Timely propaganda each year would bring appropriate matters to the public notice, who would be grateful for the advice and the industry for their patronage. Organisation and wide outlook could do much to reduce casual employment.

### (3) WET TIME.

For many years this has been a vexed question and the cause of constant irritation within the industry. On the face of it, it certainly seems a hardship that a section of the community should be penalised because of the misbehaviour of the weather. On the other hand the "dole" has made evident to all clear thinking people the ill effect upon human nature of substantial payment for no work. Every good foreman so arranges the execution of his job that there is in reserve under cover certain work which is done at odd times by men who would otherwise be adversely affected by wet weather. Would not a temporary covering over the building at once reduce wet time to a minimum, increase output generally and lessen costs by reducing the time needed to carry out a job? I know it is not an easy operation, but I feel that it can be done if tackled with determination.

Feeling that something more equitable might with co-operation be done, a group of architects after extensive enquiries found that a master builder in the London area had put into operation a scheme whereby all men in his employ should be paid 1s. per hour when bad weather prevented work. The builder employed on an average between 75 and 100 men. The scheme was arranged on an experimental basis by joint contributions of 6d. per week from every man employed, to which the builder added 3d. per week per man. After more than two years' working it was found that the amount paid out as "wet time" wages did not exceed the 3d. per week contributed by the employer, and during the two years a balance had accumulated amounting to about £185. This money has been used to give the men a holiday of two or three extra days—at Bank Holiday time—drawing their pay from the fund at the rate of 1s. 6d. per hour, thereby providing an unexpected opportunity for the men, together with their families, to get away for a change. I am

happy to hear that arrangements acceptable to both parties are nearing completion in regard to an official scheme for dealing with this matter.

### (4) OUTPUT.

In the widest interest of the industry and the community it is clearly the duty of all parties concerned to increase output to the fullest extent consistent with good workmanship. I shall call attention to figures which appear clearly to indicate that whereas the operatives in 1925 are earning 93 to 94 per cent. more wages than in 1914, bricklayers and their labourers are actually taking longer to build a rod of brickwork. It may be that there are contributory causes other than labour to this state of affairs. Be that as it may, the present position is clearly unhealthy and uneconomic and cannot be allowed to continue. Personally I have always had in mind that men in whatever station of life should be paid in reasonable proportion to their productivity. There is something clearly wrong with the psychology of the building trade operatives if they cannot be induced by higher wages and better conditions to give in return an increase of output. Nothing short of this can be accepted. I realise, however, that to reach maximum output maximum effort must be made by both sides working in unison. Every facility as well as reward must be given to accomplish this. There must be ample materials on the job—for obvious reasons a scarcity of materials tends to slacken progress. Architects also can help considerably to this end. I doubt if we architects realise to what extent the early delivery of our  $\frac{1}{2}$  in. and F.S. details, the early placing of orders for specialists and sub-contractors' goods and other matters in our control, help the builder and in turn the operative in the economic working of the job. In addition, the operations of the various trades must by foresight be made to dovetail into each other on the job without causing waste of time and a few days' "stand off."

I gather, too, that careful consideration—long overdue—is being given to such matters as economical and easily adjusted scaffolding, the easier and more speedy transmission of materials to the various positions where needed on the job. We are also giving consideration to the provision of some kind of portable bench or table the top of which would be about 2 ft. 6 in. above the level of the ground



or floor, upon which bricks, mortar and like materials could be placed and so save the effort and time expended in many cases by the constant bending of the operatives to floor level to pick up materials which should come more easily to hand. Did time permit I would wish to pursue this matter further, but I must pass on to

#### (5) THE INCREASED COST OF BUILDING WORK.

The main factors in the cost of building work may be set down broadly under four heads:—(1) Wages, (2) Materials, (3) Overhead Charges, (4) Profit, in the approximate ratio of 40 per cent., 45 per cent., 6 per cent. and 9 per cent. respectively. These figures will, of course, vary in each separate job.

*The total increase in the cost of building work to-day compared with 1914 is approximately 105 to 110 per cent.* The following table shows the rates of wages paid and the percentage of increase in the various trades in 1914 and 1925:—

Trade.	1914.	1925.	Increase per cent.
Painters ..	9d.	1/8½	128
Labourers ..	8d.	1/4½	106
Scaffolders ..	9d.	1/5½	95
Masons ..	11½d.	1/9½	87
Bricklayers ..	11½d.	1/9½	87
Carpenters ..	11½d.	1/9½	87
Joiners ..	11½d.	1/9½	87
Plumbers ..	11½d.	1/9½	87
Tilers ..	11½d.	1/9½	87
Plasterers ..	11½d.	1/9½	87

The wages of operatives in the various sub-contracting trades may be said to have increased at about the same rate. The general increase over the whole of the trades would therefore be about 93 to 94 per cent. These figures, however, do not indicate the total increase of wages on any particular job, which must clearly be governed by the proportion of labourers, painters, and scaffolders (whose percentage of increase is the highest) in relation to the other workers engaged upon the job.

The following table shows the approximate cost of certain building materials generally in use during the same period:—

Materials.	1914.	1925.	Increase per cent.
Blue Lian lime (ton) ..	21/-	58/6	179
Stock bricks (1,000) ..	40/-	98/6	146
Deal—Carpentry ft. cube ..	1/4	3/3	144
Joinery, ft. cube ..	2/6	6/-	140
Tiles (1,000 of 1,200) ..	52/6	120/-	129
Bath stone, ft. cube ..	1/8	3/8	120
York stone, ft. cube ..	2/10	6/3	120
Fletton bricks (1,000) ..	28/-	60/-	114

Materials.	1914.	1925.	Increase per cent.
Portland stone, ft. cube ..	2/6	5/3	110
Sheet lead, cwt. ..	25/-	50/-	100
Slates (1,000 of 1,200) ..	225/-	430/-	90
Sand (yd.) ..	7/-	13/-	86
Paint (cwt.) ..	46/-	82/9	80
Thames ballast (yd.) ..	6/6	10/-	54
Steel joists (ton) ..	170/-	260/-	53
Portland cement (ton) ..	36/11	60/9	65

In an endeavour to arrive at a general increase in the cost of materials it would be misleading to take all the above materials into account, for the reason that in an exceptional case only would they all be in use on one job. I have therefore, by a series of calculations, endeavoured to arrive at an equitable figure which shows the increase to be approximately 100 per cent.

We must now proceed a further stage in order to ascertain the effect of these increases on the cost of work. The table following gives figures showing in detail the approximate prime cost of materials and labour required in a rod of common brickwork in cement in London in 1914 and 1925:—

1914.	£	s.	d.
4,300 Flettons at 28/- per M ..	6	0	5
Unloading, etc., and stacking—labourer, 7 hours at 8d. ..	0	4	8
3 yards sand at 7/- ..	1	1	0
1 ton cement at 36/11 ..	1	16	11
Labour mixing—12 hours at 8d. ..	0	8	0
Scaffolding—Use and waste ..	0	1	3
Labour, 11 hours ..	0	8	3
Bricklayer, 50 hours at 11½d. ..	2	7	11
Labourer, 38 hours at 8d. ..	1	5	4

1914—Prime Cost .. .. £13 13 9

1925.	£	s.	d.
4,300 Flettons at 60/- ..	12	18	0
Unloading, etc., 8 hours at 1/4½ ..	0	11	0
3 yards sand at 13/- ..	1	19	0
1 ton cement at 60/9 ..	3	0	9
Labour mixing—13 hours at 1/4½ ..	0	17	10½
Scaffolding—Use and waste ..	0	2	6
Labour, 12 hours at 1/5½ ..	0	17	6
Bricklayer, 66 hours at 1/9½ ..	5	18	3
Labourer, 50 hours at 1/4½ ..	3	8	9

1925—Prime Cost .. .. £29 13 7½

It will be seen that in 1914 the prime cost was £13 5s. 7½d., of which amount £3 14s. 5½d. represented wages. In 1925 the prime cost for similar work is shown to have risen to £27 9s. 9d. and £9 9s. 6d. respectively, thereby showing that labour costs have increased 2½ times and materials rather less than twice.

The table discloses a further matter of interest, viz., that whereas in 1914 the time allowed in

these costs for a bricklayer was 43 hours and for labourers (including scaffolders) 49 hours; in 1925 the time allowed for bricklayers has increased to 57 hours and labourers to 63 hours.

From the above table it will be further noted that if the bricklayers and labourers would build brickwork in 1925 at the same rate as in 1914 there would be a saving of £2 4s. 6d. per rod—or 24 per cent.—at to-day's wages, and in addition profit, overhead charges, etc., would accordingly be reduced. This seems to be a clear indication that there are at least some men in the boat who are not pulling their weight. I trust that the bricklayers and labourers will not feel aggrieved if I appear to have selected them as particular

transgressors. They have been mentioned incidentally because the price of a rod of brickwork readily lends itself to a simple and direct indication of the position in a vital section of the industry.

I would wish to develop further the question of costs, especially with regard to other contributory factors, but time will not permit.

I fear I have already occupied too much of your time. If, however, our meeting here to-night results—as I trust it might—in our giving renewed thought to a subject of vital interest to us all and to the public, perhaps in due course you will be rewarded for your patience and I might be forgiven for the length of time I have held your attention.

## Discussion

THE PRESIDENT, MR. E. GUY DAWBER, IN THE CHAIR.

Major HARRY BARNES [F.], in proposing a vote of thanks, said: I rise with very great pleasure indeed to propose this vote of thanks, which is to be seconded by Mr. Nicholls, representing the National Federation of Building Trades Employers, and also by Mr. Coppock, who is representing the National Federation of Building Trades Operatives. So you are sure to get a very practical discussion at least from the two gentlemen who will follow me, if I myself am not able to contribute very much of a practical character.

I think Mr. Welch did very well in pointing out, at the beginning, the rather exceptional character of this paper, because I think very much of our thanks to him to-night lies in the fact that he has raised a question of this exceptional kind. Because here, where we mainly devote our attention to subjects of artistic and technical interest, we are plunged to-night into a subject which concerns itself not so much with the artistic and technical side of the building industry as with its human and economic relationships; and it is all to the good that a great Institute, in times like ours, should show that we are alive to the fact that there are factors in the building industry other than those which concern us as artists and craftsmen. I hope that a result of this paper will be what Mr. Welch is trying to bring about, that is a real co-ordination between architects, contractors and operatives, a feeling that building is one, and cannot be carried on in water-tight compartments, cannot be carried on by any one of these three sections while ignoring the interests of any other. But we have gone to some degree in that direction for for more than a year we have had in being a Joint Consultation Board upon which architects and builders sit, and which came into being at the invitation of the builders. I think no more gratifying tribute was ever paid to this Institute than the fact that this great section of the building industry—whose relations with us are not always of the most amicable character—should have come to us and said "Let us reason together." Perhaps a great

deal has not come out of that so far, but there are indications of some very interesting developments. The latest is that we have a joint application coming to us from both builders and operatives to discuss a matter of interest to us all, that is the question of time limits in contracts. That is only a little indication of the movement which Mr. Welch, in his paper, is trying to develop. I will close my reference to this by saying that we should welcome a similar approach by the building trade operatives with the suggestion that we should join with them on a Consultation Board on which architects would sit side by side with craftsmen to discuss their common interests. So much for the main object, which I am sure the paper has furthered.

And now just a word or two about the subject at large. One of the interesting features of this gathering is that you will listen, in a few moments, to two men who are dealing with this question from experience not merely gained in one area, but from an unusual experience gathered throughout the length and breadth of this realm, who see building carried on not only in London or Gloucester, or Bristol or any other part, but in every part of the country, and who therefore know something about the problem at large. Looking at it from that point of view, I sometimes wonder whether the problem is, in its essence, really soluble. The outstanding feature of it is the shortage of building labour. The bricklayer, the plasterer and the masons are not coming into the ranks as they used to come, relatively to the population at any given time, and it is thought that that may be remedied. I sometimes wonder whether it ever will; whether the truth is not that we in this country are really passing away from these more primitive, coarse, hard, arduous occupations, and tending to take up occupations which offer greater ease and more remuneration. I hope I am wrong but the phenomenon we are seeing in the building industry is not confined to it. It is not confined to this country there is a general tendency in every country, as civilization



advances, for the people to drop off the more disagreeable occupations, those which subject them to real hardship, and take up what everybody looks upon as occupations which are advanced. That is the history of the individual. Every individual is always trying to better himself, to leave coarse and disagreeable occupations in which he is ill-paid, and get in to something which will require shorter hours and in which he will get more money. That may be true also of the community, and what we are face to face with here may be a great tendency in the life of a nation in a high state of civilization which we shall not be able to combat. It may be that we shall have to look to other nations to carry on some of these coarser industries; but that is as it may be.

Leaving that aspect and turning to the other question, that of output, on which stress has been laid in Mr. Welch's paper, attention is drawn to the fact—and it is drawn here and in other quarters—that the same output is not being got from the craftsman to-day, particularly the bricklayer, which was obtained in the past. It may be that that is another fact which we have to reckon with. After all, the kind of output which is being measured is the output of physical energy, and I think it may very well be that as nations grow in civilization they may desire to carry more of their physical energy into their leisure time than to expend it in the time devoted to what is called work! That, again, is a phenomenon not confined to the building industry. It is very common in the coal industry for people to publish statistics to show that the weight of coal hewed by the hewer to-day is not within the weight which was hewed 30 years ago, by some 30 per cent. or even 40 per cent. What we are faced with here may be something which is inevitable in the march of progress; that if we want to increase output we must not look to increase it by making an added call upon actual human physical energy, but we shall have to look for increases of output to improvements in mechanism. It may be that along those lines the solution that we are hoping for is to be found.

I pass on now to something a little more in detail, and with that I shall close. I have been very much struck by two sets of figures given by Mr. Welch. Speaking of the shortage of labour and the possibility of increasing it; he spoke of it somewhat in the terms of its being a commodity, subject to the laws of supply and demand. I feel very certain that as long as labour is looked upon as a commodity and as subject to the laws of supply and demand we must look to everybody who controls that commodity to endeavour to restrict its supply. All who have a commodity to sell desire to restrict the supply of that commodity; they want to come into the market with as little as they can bring, so that they can raise the price of the commodity. If the wages of labour are to be determined by applying the laws of supply and demand which govern commodities, I am sure there is no co-operation to be expected from those who have any influence in increasing the supply of labour. And I am bound to add that I think that would be only natural.

Figures have been given which, I think, call for some comment. We are given figures of the increase of wage obtained in the various crafts. If wages had been regulated during the last few years merely by the supply of labour,

we might have expected the wages of bricklayers and plasterers to be very much increased, compared with 1913, over those of painters and labourers, for the latter are admittedly in very much greater numbers than the bricklayers and plasterers. And yet the figure which Mr. Welch gives us shows that the painters, who are the most numerous of all the crafts and in whom there has been the least reduction in number, have received the highest rate of increase, some 127 per cent., I think, as against 87 per cent. for the bricklayers. There may be an explanation forthcoming—and it will be interesting to get it—why it is that, contrary to all the laws of supply and demand, the craft which has the largest number of men has been able to get the greatest increase in wage.

The last point I shall touch on is the attractiveness of the profession. Theorising is sometimes apt to play one strange tricks, but I was theorising that the falling off in bricklayers and plasterers was due to the fact that neither of them was an attractive trade, and that you would find a boy much more likely to be a carpenter and joiner than a bricklayer or a plasterer. Yet the figures show that the falling off in joiners and carpenters is as great as that of bricklayers and plasterers. I shall be glad to hear from Mr. Nicholls or Mr. Coppock some explanation of that point. Whether it is that the carpenters and joiners must march with the bricklayers and plasterers, and if you have a 24 per cent. drop in bricklayers you will get it also in carpenters, I do not know. I am curious to know how it is that a more attractive trade, carried on in much better conditions—without "wet time" and under shelter—has decreased to the same extent as the more exposed trades of bricklayer and plasterer.

It has been a very great pleasure to me to propose this vote of thanks to Mr. Welch.

Mr. W. H. NICHOLLS (Past-President of the National Federation of Building Trades Employers), in seconding the vote of thanks, said: running through Mr. Welch's paper there has appeared an earnest desire that the architectural profession may take a larger share in conducting, guiding and moulding the forces of the building industry than they have been able to take in the past. In the Cotswolds, where I come from and where we say the type of England's architecture is not excelled by any other in the country, you cannot stand in a church without feeling that there is a wonderful harmony in the work of building, both in its creative and directive force and the hand which put into operation what was directed by the brain. There has been a tendency in recent times to divorce the brain from the handicraft, and anything which will bring us back to a happy co-operation will be all to the good of the industry.

There is one point which it will be well to state at the outset, namely, that the building industry has always been a very self-contained industry as far as its government is concerned. The general public hear far more of our disagreements than of anything else, but I assure you that our agreements far outweigh and outnumber our disagreements. The improvements which we have worked together for the good of the industry have been very great, and, incidentally, not critically, may I take the strongest objection to the statement that has crept into Mr. Welch's paper—I do not know whether Mr. Welch meant it to

come in in quite the way it has. He says "The professional class, by virtue of the position it holds, is at once concerned with safeguarding the public interests." We, as representing the business side of the craft, consider that there is no need for anyone to be set over us to safeguard public interests. We shall always seek for the utmost co-operation, and that given, I am sure good will result to every one of us.

I am extremely grateful that Mr. Welch has touched on what must be of deep concern to every employer and every operative, because we, employers and operatives in the building industry, have long ago reached the point where neither of us is given control of the business side of the industry. The employer is only a servant, a servant to the community who brings him into being; and if the command of the community at one moment is X, and at another 5X, and at still another minus X, you can understand the difficulty the employer is in to maintain continuity of indentured labour. I think the best brains of decent people, who want life to be better for all, have been exercised in trying to find a remedy, but I do not think a solution has yet been found. The building industry is dragged down from its business side by competition. I do not want to be misunderstood about this. Competition to produce the best thing brings out what is best in a man and gives the best result. But competition in the business world produces the devil in a man. It encourages in him the desire to carry out the least he can. I say this with a knowledge of the industry and the competitive methods in various parts of the country. The successful business man, from this point of view, is the man who is able to give the least value in the competitive market for the money he receives. I cannot see any satisfactory way of conducting the building industry under our present methods of competition. Mr. Welch's paper gives us the opportunity of voicing some of our difficulties. It is generally the practice, in asking for competitive estimates, to ask 6, 8, 9 or even 10 builders who are on a general level of standing, and in addition one builder whose methods are entirely dissimilar. I am speaking of the experience of the trade generally. The Federation I represent only stands for federation so far as the observing of rules for guidance in the industry are concerned. The way in which a man carries out his business is no concern of ours. One point which must be borne in mind is the effect of legislation on the cost of industry, and if that is included in the "on costs" Mr. Welch's figures might be nearer the mark.

From the employers' point of view I can think of nothing but good coming from a tripartite movement which will assist the training of apprentices in the building industry. The best of employers in this country have been striving to educate their members to receive apprentices. From the operatives' side we have received only goodwill; it is only fair that I should pay tribute to that. We have far more difficulty in getting our employers to take apprentices than we have to get the goodwill of the operatives. All those who are really concerned with the future of the building industry cannot help being deeply concerned at the thought that the best brains of the country have been going into other industries. Why could not they come into ours? It may be that through our own narrow-mindedness we have not made the industry possible or

attractive to them. The question of the flat rate may have retarded men of ingenuity and originality from coming in. But any action that can be taken which will direct reasoned and careful thought to increasing the personnel of the building industry and bringing in the best brains will be for the benefit of us all. It will increase production, it will diminish cost, it will improve the class of craftsmanship, and, if such a thing could come about, it would create in operative, employer and architect a sense of community of interest instead of what is perhaps accentuated more than is necessary, division of interests because we do not understand one another.

I second with much pleasure the vote of thanks.

Mr. R. COPPOCK (General Secretary, National Federation of Building Trades Operatives): I want to support the motion before the meeting, but there are many things in the Paper that I want to criticise. I like the spirit which permeates the address. I am not going to deal with costs, as to what was the cost of work in 1914 in comparison with the cost now. What I have to say on that is that our people have more sense to-day than they had in 1914 or 1919. In former times their only education and recreation were very hard work, and they believe there is a certain amount of leisure which is due to the human body, as well as work. You will never get back to 1914, for in that year the position of building trades' operatives was even worse than that of the agricultural worker in this country. If you take the wage rate of 1914, in comparison with that of 1925, you are showing a state of affairs which was very mean. We were too cheap, and so were architects and builders as well as ourselves.

We, as operatives, are very pleased to be here this evening, and we would be very glad to have architects associated with us. We have always looked upon you in this Institute as somebody really superior, as standing on a pedestal, somebody not to be touched, giving your advice to the builders, and always your advice has been directed against us. When we have met the builders on the question of increased wages, they have said "The architects have said the cost of building is too much now, and we can't give you increased wages, because building clients are not making arrangements for work." We should like to meet you to know whether you do say these things or not. We have our doubts. We want different conditions from even those we are enjoying to-day. We are not going to say our builder friends have opposed us when we have been trying to get better conditions; they have done their best. We had the first national dispute for about a hundred years in 1924. We did not cause it; of course they were responsible for it, not us; we are peaceful people in the industry. But we believe they tried as far as was within their power and within their limited outlook. We are the most conservative industry in the nation; architects are very conservative, so are the builders, and so are the operatives. We do not appear to be able to get away from the old ideas and the old traditions, but we have got to do so if we are going to attract people to our industry, especially if, as Major Barnes said, there is a tendency for people to get away from the arduous jobs of life. There should be a desire to get our boys to realise that our industry is really a very noble one. I know that when I was learning my craft—



and I am one of those terrible bricklayers—I was very pleased indeed to be able to show my father what I had done, and I am very pleased now to go round and see some of the work I did when I was working—of course, I do not work now—I am a trade union official! If that sense of building something could be inculcated in our schools—and it is not—it would be a good thing. In fact, in our technical schools the first thing that is told the boys is, “if you are very efficient you will become a foreman, or possibly a master builder.” It is sheer nonsense. That is one of the exceptions I take to the Paper. We take the trouble to train apprentices so that they shall be efficient, and then you take them in charge and produce from them foremen and employers of labour. It is workers we want. The employer only pays our wages, he does not produce. I assure you we are willing to co-operate in any apprenticeship scheme. We have argued with the employers’ association and they have agreed that it can only be solved by the co-operation of operatives and employers. But they have a very difficult task with their rank and file, quite as difficult as we have with ours. There is so little difference that if you went to a meeting of the operatives and one of the employers and you were not told which was which you would not be able to distinguish between them. For instance, we have been talking on the question of wet time for five years, and we are still talking about it. We believe it is possible to overcome some of the difficulties which prevent the industry attracting men to itself, and as long as we talk we are all right. But immediately we do something and set it down on paper there is a terrible row. We go to committee after committee and meetings year in and year out, and immediately we do something the cat is among the pigeons. Recently we met in conference and agreed that certain things should be presented to a full committee on the contribution to be made for wet time to the operatives. And the most profound statements were then made—all on principle; of course, the smallest detail becomes a principle—and it was said this could not be done and that could not be done. The real principle at the back of it is that we want to avoid paying anything; that is the fundamental principle you have to face. You architects must help us on this question; there must be some continuous employment. My father, who is a bricklayer, 61 years of age, has earned two hours’ wages in three weeks; he is staying the rest of the winter with me. I have been in the north addressing meetings this week, and building trades operatives have informed me that they have taken five shillings and sixpence home these last three weeks, and they have got to keep wife and children. Some operatives in a village I know have been on the *Guardians* for some time, Chester-le-Street, and that is a situation which is not very nice. It is a position which the industry has got to tackle. I know we shall put the cost on, but in comparison with many things which are being supplied in this life what we are putting up is very cheap, and it is durable. Look at the buildings we are erecting—I am not referring to the synthetic method of housing. I believe that the economic system has produced this buying in the cheapest market and selling in the dearest, and it is said it is wrong. If it is wrong with us, it is wrong on the part of the people who are controlling the industry of this country. There must be brought into industry more of

the human element. It is said we are the people who violate all your schedules. Contracts are given to the men who will do the work the cheapest. I have heard it said, when tenders are being considered, “We will give it to this chap; we know he can’t do it at the price, so you must put an extra clerk of works on to watch him.” We want to participate in the industry; so far we have never done it. We have never been asked to have a voice in the management. We are told that is not our job; what we have to do is to get on with our work, lay the bricks, or saw that bit of timber, or do that bit of plastering. There was an effort made under the Industrial Council to bring us in, but we were shut out, and we had to go on our own. We are out to do the best we can for our people; to give them the best economic conditions they can have under the present conditions of society. We, as a Federation of Building Trades Operatives, believe in a flat rate of wages. We believe it is an accident what particular sphere a man may be working in; in the main, and we do not think there is any necessity for a differential rate of wages in consequence of a certain overplus of men in any industry. If that is the basis of the argument, it will be policy for us to restrict entry to our industry more and more. But we do not want to do that. We believe there are reasons why the painter should have the same rate of wages as the bricklayer. The bricklayer says he loses time in wet weather, the joiner says it costs him more for tools, the painter says he is working in white lead and as a result his life is not a long one, the plumber is the aristocrat of the industry and is entitled to his fee. There is really reason for every man having a flat rate. We want to co-operate with our builder friends, and we want the co-operation of the Royal Institute of British Architects. I want to say to Major Barnes that if it is necessary for us to approach you we shall be only too pleased; but the great difficulty is that we feel that the dice is loaded twice against us; we think many of you have the point of view of the building contractor, not the point of view of the building operative. We think you have not an unprejudiced mind when dealing with labour problems. We want to say to you that you are very inconsiderate to labour on many of your jobs; you are more concerned about your client than you are about the men who are working on the job. You often shut a job down without considering the people who are working on it and are getting their living out of it. There is a particular contract in a cellar; the work has been covered up, and the job has been stopped three weeks “for frost,” but there is no possibility of the frost getting near it. It is all right for the architect. You should not only use your brains in designing, you should also use them as far as manning the job is concerned. I do not think it would be possible for architects to participate on a wage board. As far as we are concerned, we should ourselves like to be the wage board, and I think we should be able to settle things very well.

I want to say to the lecturer this evening that we are opposed to payment by endeavour, a point he makes in his address. It is as unfair to our industry as is competition on the basis laid down by Mr. Nicholls. The pace is set by the young men, and the old men are chased out. It lays itself open to scamping of work; there is no industry which opens itself to that so much as the build-

ing industry, because you can put a nice skin in front of it, and people do not know what is inside it; it is like a sausage. I realise that you men, who have been trained on the merit principle, cannot see our point of view. But there is a future for our industry, and I think we shall be able to attract youths to it. I do not think there can be any help from the absorption of labourers. While we agree with the Government that adults may be enlisted in our industry, we pledge our faith to the boys coming in at about 15 years of age, because we think they make the better craftsmen. They are not coming in to the plastering, and I do not know how we shall get them; every effort has been made, both by operatives and employers, in that direction; I do not think they will be attracted even if you pay them another 6d. an hour.

My Federation is only too delighted to be associated with the Royal Institute of British Architects and to meet the builders. We feel that in meeting the builders you have acted unfairly towards us, yet we are one of the important links. We would like to be on your councils and that you should understand our point of view. We are very simple men, dealing with a very difficult question, and we say that on the most important questions in the industry to-day the architects can give us some assistance; then there would be no difficulty with the builders of this country. Have a scheme of payment for wet time, even a scheme of payment for holidays, for if there was a general understanding that would be possible.

I have to apologise for the absence of my President, who, as those in the Federation know, lives at Glasgow, and could not come. I want to tell you that the most important paper to read is *The Operative Builder*. If architects want to know about the building industry from our standpoint, that is the paper to read.

Mr. HENRY MATTHEWS (Past-President, National Federation of Building Trades Employers): I do not think I can add anything useful to the discussion, but I consider it a great privilege to have been able to listen to this excellent paper. The matter is so full of difficulty that no one can set himself up as an authority and say "This is how it should be done," and so settle it. What we have to do is to educate one another, so that ultimately we shall come to conclusions that are more and more in unison. With the assistance of architects and the co-operation of our colleagues amongst the operatives there should be no difficulty in eventually arriving at a conclusion which will bring more peace into the industry than we are enjoying at the present time.

Mr. GEORGE HICKS (General Secretary, Amalgamated Union of Building Trade Workers): I am very pleased to be here to listen to the excellent paper which has been given us by Mr. Welch. There is much in it which, had there been time, I would have liked to criticise, particularly the matter relative to the personnel of the industry, when he takes the figures back to 1921. Many things have happened since then. I think there can be no more eloquent justification of the need for architects to be associated with employers and operatives in the industry than what has happened since 1921.

I am particularly pleased by the reference to "wet time." No person feels happy if he realises that other people are unable to get the necessities of life. It is not only the mental anguish and anxiety they suffer, but also the physical suffering, and everyone desires to make a contribution to the unfortunate state of affairs which is represented by casual labour. But when in addition to the casual character of the work there is the question of wet time, how is a man to budget for his home? A man with a wife and family cannot cater for them in such conditions. I appreciate much of the work which has been done by architects in endeavouring to arrest public attention in this matter. Those who have a full week every week cannot understand the economical harshness and the difficulties of accommodating life to these hardened circumstances. We can pass resolutions and cheer sentiments favouring the worker, but unless we are experiencing the physical handicaps we cannot feel about it sufficiently poignantly. I am hopeful that your reference to-night, sir, will mean that there will be a combination of all the brains in the industry to introduce, as has been said, more humanity into the industry. Then there would be more contentment.

With regard to the figures dealing with output, they appear to me to be not in accord with the general facts of the situation. I will give you the figures in bulk, and we can analyse them subsequently. The number of bricklayers we had in Great Britain in 1914 was 25,000 more than we had in 1924. The number of bricks which were produced and imported in 1914 was less than three thousand million. This year we produced and laid over five thousand million. We laid two thousand million more bricks in 1924 than in 1914, with 25,000 less men. None of us in the industry stand for indifference or laziness. We believe we pull our weight. But in addition we want the feeling that there is some sense of economic security. The fact of having to work faster to be unemployed soon lacks attraction. We regard our industry as being a very important one. I am not one of those who believe we are not attracting good men. We have good men, men who can take their places in the councils of the nation in any walk of life. And I am sure there is an improvement in architecture; the buildings of to-day are pleasant compared with some of the shoddy work we have had in the past.

Mr. FRED THORNE (President, London Master Builders' Association): I think this is the first time that builders and operatives have been called in conference with you on this most important subject, and we trust that it will not be the last.

In Mr. Welch's paper it is stated that there is an agreement that there shall be one apprentice to seven operatives. That, I assure you, is not the case. In London to-day we have an agreement that we can have one apprentice to four operatives. In the schemes for the housing of the working classes we can have one in three, and it is to be deprecated that this is not being taken up as ardently as was to be expected. We are hoping that when we get a little more peace from the little side troubles—wet time, early rising, going to bed late, and so on—we shall get down to work, and that there will be attracted into this noble profession of ours young lads who will be proud to do what their



fathers have done before them. It is true it is not attractive to ask a boy to be a bricklayer or a plasterer, and the main reason is that the technical schools are mainly interested in training boys for the joinery and carpentry crafts.

One's experience is that parents bring lads to offer them for this particular craft mainly owing to the lad concerned having been taught to this end; whereas, while there is plenty of room in the industry for bricklayers, plasterers, plumbers, it is with great difficulty one can persuade the parents to apprentice these lads to one of these crafts.

If, therefore, Public Authorities would extend to these crafts their help it would tend to alleviate the present shortage in these key trades.

Mr. JAMES MURREY (Secretary, London Regional Council, National Federation of Building Trades Operatives): It is often a disadvantage for a speaker to join in a discussion late in the evening, but on the subject of the building industry there may well be something left after others have spoken which is worth hearing.

I think Mr. Welch is considerably out in some of his figures. I think he said there were 60,000 masons short compared with 1914; but there were never 60,000 masons in the country. We had a very fine organisation of masons, and they did not number 30,000. That needs to be corrected, or else it will give a misleading view about the craft. As regards joiners, the unemployed insurance cards issued to carpenters and joiners now show that there are 20,000 more in the industry than in 1914, and insurance cards are a very reliable guide. When it comes to the question of apprentices, again I want to say that Mr. Welch is substantially out in his figures. There are, roughly, 30,000 building mechanics organised in London, and if the facilities for the training of apprentices were taken full advantage of by employers we should have 7,000 to 8,000 apprentices working in the trade in London alone. But I could not find 2,000. Who is to blame for that state of affairs? You are right in saying that the reservoir of labour which used to supply London—the provinces—is not now operative. But if this apprentice matter were fully dealt with, the shortage would soon disappear. I do my best, because my function is not only to negotiate with employers for  $\frac{1}{2}$ d. an hour more, or something of that sort, but to improve the status of the industry we are engaged in. I try to work along those lines, and persuade my fellow members to do likewise. I sometimes wonder whether it is appreciated what a great change is taking place in our industry, and in others. There are no facilities now for the training of the all-round craftsman, as there used to be. We are getting very much specialised, and machinery is largely doing what formerly the craftsman was called upon to do. There is a factor which sometimes breaks the heart of a craftsman—you will excuse my mentioning it—the client and architect are frequently responsible for continual alterations on the job and nothing disgusts an operative more than doing a piece of work and having, two or three days afterwards, to pull it down again. When the job is finished and the cost got out, the comment is sometimes made: "The lazy beggars, look what this job has cost!" Many employers say, if we had payment by results or a premium bonus system in operation, many of their difficulties would disappear. If

you are going to pay a man in accordance with his output, you must have the organisation and the material to give him that output, and this would necessitate the reorganisation of practically the whole of the jobs in London. If there were this co-operation of architect, builder and operative, we should, in a short time, remove many of the difficulties. One of the principal difficulties is the shortage of skilled labour in certain trades. There are more apprentices on the subsidised housing schemes of London than has been mentioned by Mr. Welch; which shows that there is a desire to encourage the young boys to enter the industry. I want to make a point which is fatally missed by most employers, and that is, the direct personal touch of employers with their operatives and with the boys during their period of training. Often at the present day a boy does not know the name of the firm, but that a foreman is looking after him. I feel sure that the psychological effect is not appreciated of the employer having direct contact with his apprentices.

Mr. MAURICE E. WEBB [F.]: It is a very good thing we should meet together. What I am particularly interested in is wet weather time. I was lately a member of a group of architects who investigated the question. We asked trade union leaders to dine with us once a month to discuss the question of wet weather time, because we feel that it is a bad thing that men should be turned off the job if it rains or snows, or because the state of the weather prevents them from working. The discussions were all private and confidential, and we are not at liberty to mention names; but several of those who were so entertained are here to-night. You have all seen the occasion when the foreman has blown his whistle and 50 or 100 men have to leave their work and do not earn a halfpenny during the rest of the day. Most builders and trades union leaders tell us there is nothing costly in the payment for wet time, but that is a week per man would be the outside figure. We went into it, and found that a contractor in Chelsea, Mr. Dixon, who has paid wet weather time to 100 men, puts the cost at 3d. per week per man, and the arrangement works satisfactorily between himself and the men. I feel that the master builders in London have been very stubborn over this wet weather business. I have longed many months for an opportunity to say this in public. All our sympathy lies with the men.

When you come to output, the question is different. Mr. Coppock says he does not believe in payment by results. But you can't have it both ways. When architects try to help the men to get wet weather time, perhaps they will help us to get payment by results. We want to see that when clients pay large amounts for a building, they get the proper amount of work for their money, and I think the workers are anxious to give them fair value. Perhaps Mr. Coppock will try? (Mr. Coppock: I must have notice of that question.) Probably we do not mean the same thing, and it is time we sat down and deliberately tried to understand each other's meaning. I hope there may be some triangular conference with this object in view.

The PRESIDENT: It is very late, and there is nothing that I can add to the most interesting paper and

illuminating discussion. I can only say, on behalf of the Institute, that we have been exceedingly glad to see to-night those we do not, I think, see often enough in this room, that is to say, the employers and the representatives of the operatives. If, as Mr. Webb says, we could meet together and discuss our problems—architect, builder and operative—I am sure we could make much better progress and we should be able to smooth out many of the difficulties. Many years ago—I do not like to say how many—I was a clerk of works, and for five years I was on buildings—two very large ones—every day. During those five years I learned what has been of inestimable value to me ever since. That was, that there was no better workman in the world than the British workman. The work he does, and did then, is, I am perfectly sure, excelled by none. I feel the force of what Mr. Hicks and Mr. Coppock said: if in any way we can make the workman's path smoother and help him to better times and better wages, we shall all be doing a very great work.

The vote of thanks was carried by acclamation.

Mr. WELCH, in reply: It is a clear indication to me that this paper has been well worth the doing, because, unless I am very much mistaken, I have seen here to-night some indication of a new spirit in the building industry. Speakers have voiced opinions leading in the direction I had hoped for. If those expressions are sincere—and I have no reason for thinking they are not—then the meeting will have the result of bringing nearer co-operation which many—if not all of us—feel to be essential between the various parties. I expected that my figures would be subjected to criticism by one party or other, and I therefore went to a great deal of trouble and research in connection with them. I have been perfectly amazed at the degree of variation in the authentic information available concerning the building industry.

With regard to the question raised as to the cost of a rod of brickwork. So far as my arithmetic is concerned, I can vouch for its accuracy, because I have had it checked and counter-checked and worked out by various people. The conclusions there arrived at are based upon figures supplied to me by two firms of quantity surveyors and three firms of builders, to whom I am much indebted for

help. Since, however, the figures supplied to me did not agree in any two cases I have had to make what I consider to be a fair computation. Two items, however, were consistent, viz., that the cost of materials had increased and that the actual time taken to build a rod of work had also considerably increased in comparison with 1914. The variations regarding the length of time now taken by bricklayers on their work were considerable and the figures quoted are averaged.

The figures I gave regarding the number of operatives in the industry, I also expected to be questioned. So far as my percentages of reductions are concerned, I can vouch for their accuracy, for I have had them checked. The sources from which I quoted were, in the one case, the number of craftsmen returned by the Census in 1901, 1911 and 1921. In the other case (Table 2) this was compiled by the Ministry of Labour in 1924, especially to serve the purpose of the Committee then set up by the Ministry to ascertain the labour available for the Government's housing schemes. I think I could get no better authority for my figures.

I have endeavoured to make the best deductions I could from these sources of information, and whatever the actual figures I think the percentages cannot be very badly out. If there is any general ignorance displayed in this paper regarding the industry, I feel sure it is shared largely by architects in general. It is not our fault, because hitherto we have not been given the opportunity of understanding the inner workings of the industry. If, however, you extend to us not a privilege but an opportunity to perform a duty which we, first as citizens and also as participants in a big industry, should have, then I think the degree of ignorance will from year to year diminish and all parties will be the better for a closer co-operation.

There are many other points I would wish to touch upon, but the hour is late. I must therefore conclude by expressing my warm thanks for the way in which you have received my paper and the kind things you have said about it, which I fear are not fully deserved. I wish also to acknowledge with thanks the assistance I have received from many sources in my search for information.





# The Dome of the Rock in Jerusalem

BY WILLIAM HARVEY.

AS Consulting Architect to the Noble Sanctuary in Jerusalem, Mr. Ernest Tatham Richmond, F.R.I.B.A., writes authoritatively upon the principal building contained within this remarkable sacred enclosure. His sumptuous work\* combines with the general interest of a description of the structure and decoration of the Dome of the Rock, the professional interest of a report upon proposed methods of repair and redecoration.

The subject is worthy of the painstaking investigation Mr. Richmond has bestowed upon it, not only as a wonderful example of polychromatic architecture, but as the expression of very real piety continued throughout several centuries.

Referring to the persistent attempts to maintain the building in a fit state to embody the sentiment of the holy place, Mr. Richmond rightly maintains in his preface that "The Dome of the Rock is, then, alive—almost in the same sense that a man is alive. It changes its tissues and it renews its structure in order to maintain power to enshrine the soul that is in it. It is much more than a place of archaeological or 'artistic' interest. It is of a living Faith, the living symbol, striving, by the strength of the Faith it represents, to survive in the face of many and great difficulties."

Now this statement is not only true from the point of view of the statistician cataloguing successive historical repairs and noting the care with which they have been executed, but it is also true to the impression one gathers by the happy process of living for any considerable period within the building. Those who know the Dome of the Rock best love it best, and find themselves most anxious that it shall continue to be the nobly beautiful creation that it has always been. The proposals of fanatics that the building should be demolished and its site given over to "a worthier shrine built perhaps to the honour of some other Faith," must be repugnant to all who have enjoyed the privilege of study beneath the dome, and they will agree with Mr. Richmond's plea for the judicious repair of its structure and decoration.

Just what treatment should be given in detail to each defective part is not so easy to determine. Many pages of the book are occupied by the description and illustration of the present state of the exterior tilework. Since the external coating of mosaic fell into decay and a new facing of tilework was given to the building after the Turkish conquest, the tiles themselves have decayed and been renewed and adapted at several different periods. Late repairs have been executed with tiles of indifferent or bad quality, or by means of patches of dingy grey Portland cement.

Such methods are obviously unworthy of the great building and good tiles should be prepared and used to replace the bad modern tiles, and to clothe the bare patches. Mr. Richmond has already taken steps to reintroduce the art of tile-making in Jerusalem, and, with the help of

Armenian tile-makers, has produced examples of a quality far superior to those used in recent repairs. Simultaneously he has discovered a few tiles of superb design still remaining upon the walls and others in the various minor buildings within the sacred enclosure.

From these he has produced drawings showing a conjectural restoration of an old design for the treatment of the exterior tilework as a consistent whole. The proposed method of applying new tiles, when these have been made, is indicated on page 75 of Mr. Richmond's book: "... the work below the cornice of the north-eastern, eastern, south-eastern and southern façades is in comparatively good condition. It needs little more than small repairs consisting in the replacement by new tiles of those no longer able to resist the weather. On the four other façades the tiles date mostly from 1874. Many of these have already lost both their glaze and their colour; most of them have been re-set on more than one occasion since that date, and their actual setting is not of a kind to promise a long life. . . . It is therefore desirable to renew the tile decoration of these four façades and of the parapet wall. On the drum the mosaic inscription needs repair where it has fallen or where it has been repaired with inferior tiles. The panels between the windows need completion with facsimiles of the old designs. The windows also need a good deal of repair, and the band below them needs practically complete renewal. About twenty-six thousand new tiles are needed. The cost of the work described would be about £E.8,000."

The opening chapter upon the structure of the building is well illustrated with photographs and diagrams among which a section is included with a superimposed fly-leaf to show, by means of a geometrical grid, the simple geometrical proportions of the setting out. I have already had occasion to mention some of the geometrical proportions of this building, and its curious irregularities in the JOURNAL R.I.B.A.† Mr. Richmond has come to very much the same conclusions, but has also discovered that the height of the dome and the height of the external octagon are related to the unit of measurement adopted for the breadth and height of the central drum. The height of the octagon is shown by the geometrical lines of the grid to be equal to 1.732 of the height of the main columns beneath the drum, and the heights to springing level of the drum windows and to the summit of the dome are also geometrically determined by means of lines inclined at 60° to the horizon.

Of the condition of the structure, Mr. Richmond is able to speak reassuringly. It is not in serious danger of failure, though small defects, such as leaks in the lead covering of the roofs, have affected the priceless colour decorations within.

Windows pierced in the outer dome of the central part of the building on the occasion of the German Emperor's visit are suspected by Mr. Richmond of having a pernicious effect upon the coloured and gilded plasterwork of the inner dome.

\* *The Dome of the Rock in Jerusalem*. By Ernest Tatham Richmond, F.R.I.B.A., Consulting Architect to the Noble Sanctuary in Jerusalem. Oxford, at the Clarendon Press, 1924.

† R.I.B.A. JOURNAL, 19 September 1925, p. 614.

While a cushion of warm air existed between the domes the inner shell was protected from alternate expansion and contraction, and this insulating layer has been seriously impaired by the recently executed windows.

The splendid stained glass windows are also robbed of their proper effect by the contrasting glare of light which enters through these plain windows at a higher level. Their brilliancy, too, has been reduced by the accumulations of dirt upon their outer sides, and Mr. Richmond puts forward a satisfactory scheme for making them accessible for cleaning.

Of the many illustrations, several are colour diagrams representing individual tiles or groups of tiles, executed in one or other of six principal periods of redecoration. Two windows of the drum and a fragment of geometrical pavement are also illustrated in colour.

Mr. Richmond's painstaking drawings, from which these illustrations have been prepared, are valuable records of the patterns of the tiles, but his plea for the removal of recent tiling and its replacement with new might have been strengthened had some detail illustrations been added to show the varying quality of the enamels and glazes of the tiles of different periods. Some excellent photographs of the interior indicate the artistic

importance of the rough limestone rock in the midst of the highly ornamental shrine.

Strangely enough Mr. Richmond has not given prominence to the meaning of the Rock in relation to the whole building. The sacred Rock is identified with Arbaham's sacrifice, David's repentance, the altar of Solomon's temple and the scene of the Prophet's ascent to Heaven. The spot is considered as the point of earth most closely connected to that Happy Land and the lavish decorations upon the building are appropriately indicative of its fertility and felicity. Floral subjects, conventionalised in conformity with the ban on naturalistic representation, predominate on the exterior, and flowers, fruit, wings, and crowns, also conventionalised, are blended in the arabesques of mosaics inside the building.

In a chapter devoted to "Inscriptions on Tiles," Mr. Richmond gives, among others, a translation of the inscription over the Northern Entrance which mentions the entry of troops of the Faithful through the open gates of Paradise, but beyond stating that the North Door is "commonly known as the Gate of Paradise," he does not indicate in his book the importance of this idea in the composition of the magnificent building.

## The Waterloo Bridge Debate at the L.C.C.

15 December

BY RONALD P. JONES [F.], L.C.C.

By the time this JOURNAL is issued the debate will have become a matter of history, but in view of the very inadequate reports in the Press it still seems desirable to place on record some fuller account of it, while the names of the 32 members who fought, spoke and voted to try and save the bridge should be published as a matter of justice.

The debate lasted for three hours and was very fully attended, but it was evident from the moment that Mr. Gatti began his speech for the amendment (to proceed with a new bridge) that the result was a foregone conclusion—not so much from anything that he said, but from the "mass tendency" which a member of the Council can feel by a sort of instinct. Mr. Gatti spoke for forty minutes with a deliberation which appeared to me intentional; he declined to recognise that the position had altered in any way since the decisions of February, and still pointed to the advice of the first two engineers consulted, as if it was valid against all subsequent opinions. He also reiterated the interpretation of the letter from the Council of the Institution of Civil Engineers, as if this document was an expression of technical opinion, although the letter itself stated that this was not the case. He devoted a considerable time to a technical point of the depth of foundations, in which the Council was quite unable to follow him, and which

was an excellent example of the kind of question which can only be decided by an expert tribunal. He also made a most important admission—that if it had been possible to provide four traffic lines on the present bridge he might have taken a different view of the matter, which implies that the bridge *could* be underpinned, and that the only consideration in his mind was the mere claim of traffic utility.

He entirely evaded (and evidently had not really considered) the crux of the traffic problem—what to do with the increased traffic when it gets to the Strand—and touched vaguely on the Subway scheme, of which a model exists at the County Hall, and which I maintain to be a complete fallacy, creating more difficulties than it solves; also on a bridge scheme over the Strand, which is open to exactly the same objections. Like all the speakers, he admits that the six lines which they demand are quite useless until the whole of the surroundings on each side of the bridge are rebuilt (including Aldwych, which is not yet finished!), and that all they now require is a four-line bridge.

The next four speakers each occupied the full time which the Standing Orders allow (15 minutes, and an extension of 10, informally conceded by the Council at the time), which I am told has not often happened in any debate of recent years. Lord Falmouth, in



seconding, spent some time on the Charing Cross project as the alternative, and claimed that the Charing Cross bridge was so unlikely to be removed that the scheme could not be calculated on within any reasonable time, overlooking the fact that it is already in a weak condition and the Southern Railway has to restrict its use seriously. He pointed to the risks of the process of underpinning, and described a recent collision which had taken place under one of the arches between two vessels, which would have led to serious loss of life if the underpinning operations had been in progress at the time.

Mr. Norman, in opening the case against the amendment, claimed that the Bridges Committee was consistent in its present recommendation, since they had always taken the line that *if* the bridge could safely be preserved it ought to be. He pointed out, in answer to the frequent argument that the Council ought to be able to decide its own affairs for itself, that it does habitually take expert advice on all kinds of technical points, as when the design of the County Hall itself was under consideration. Also that there have been many cases in recent years when the "claims of art" (as the Bridges Report expressed it) have been put above the "claims of utility," as, for instance, the steps of St. Martin's-in-the-Fields and the Whitgift Hospital at Croydon. Being himself admittedly the writer of the Bridges Report, he was able to repeat and underline many of its arguments, but although he is the most distinguished convert to our side I felt that he had hardly gone the whole way, and that too many traces of the old faith still clung to him! His influence with the Council is so great, and the effect of his conversion from the new-bridge policy so striking, that if he had been a little less impartial he would probably have won over many undecided voters.

Following him, I was able to claim the consideration shown for a maiden speech, having intentionally remained silent in the Council since my election in March, seeing that this debate would eventually take place. In the available time I believe I made use of all the possible arguments for preservation, both positive, on the value of the bridge and the possibility of saving it, and negative, on the fallacy of the idea that a wider bridge would really be of any use to the traffic problem. The fact that until 1923 no one had ever dreamed of suggesting that the bridge should be taken down; that it is now secure enough (except for the one weak pier) to have served as a platform on which to erect the steel girder span for the temporary bridge; that the conflict of engineering opinion, while quite natural, shows a heavy majority on the side of underpinning, which is not affected by the advice of the Council of the Civil Engineers; that while the "claims of art" are universally admitted, even by the "destroyers," the "claims of utility" are highly controversial, and even fallacious, as shown by the refusal

of Mr. Gatti to commit himself to any method of dealing with increased traffic at the Strand. This latter point also affects the question of cost, because it is admitted that underpinning must be in *some* degree more economical than any reconstruction, but it has not been noticed that the estimate for the new bridge has never included any estimate for the cost of a Strand subway or bridge, one of which is absolutely indispensable to the wider bridge scheme, and will therefore still further increase the total cost.

Mr. Morrison, the Labour Party leader, who followed, repeated his former argument that modern architects ought to be quite well able to produce as fine a design as Rennie did; he also offered a curious new argument—that it would be impossible to find an impartial expert tribunal, because all the available engineering talent had already been consulted or was connected with the Institution of Civil Engineers, which had declared itself against underpinning. He called on the Council to assert its own authority and make up its own mind, and so on.

Mr. Culpin, who had the advantage of being one of the deputation from the Architecture Club before he became a member of the Council last March, was able to deal with several of the points made in the two opening speeches, and stated that the risks of demolishing an existing bridge were even greater than those involved in underpinning it (which has probably not been recognised by the Council, which looks on "taking down" the bridge as a very simple operation), and suggested that whatever the possibilities of modern architecture might be, a new bridge would not have the historical associations of the present one.

By this time more than two hours had been spent, and the remaining speeches were comparatively short; Mr. J. D. Gilbert, one of the veterans on the Council, spoke on the navigation problem, and against preservation; Dr. Scott Lidgett on the traffic problem at the Strand and its obstacles to any wider bridge; Mr. Tasker, M.P., was partly inaudible, but I understood him to be deprecating the merits of the bridge as an architectural design—the only speaker in the whole debate who ventured to do so. Mr. Meinertzhagen, Chairman of the Improvements Committee, declared himself a convert to preservation; and Captain Swinton, in a few beautifully-phrased sentences, spoke what he called the "swan song" of the bridge. Referring to the frequent exhibitions in the lobbies of the Council Chamber of old prints or photographs of vanished London buildings, he said "we look at them and say, 'What a pity! Need they have been destroyed?' In this way will our descendants look at the illustrations of Waterloo Bridge and say, 'What a pity! Were they *quite* sure that it had to go?'"

The division showed a majority of 50 for destruction—82 for, and 32 against. The size of the majority is surprising, and is partly due to the fact that the

Labour Party at the last moment insisted on making it a "party question," and claimed that its members should vote *en bloc* for the amendment. A few of them refused to do so and were absent from the division, while Mr. Culpin voted with us. The amendment was really carried by the 57 Municipal Reformers who voted for it.

Following the procedure of the Council, the amendment was put formally as a resolution and passed by consent, as there would be no point in immediately repeating the division upon it.

I can point with some satisfaction to the fact that the Progressive Party, to which I belong, though far too small to affect the result, showed a majority for preservation—five for and three against. The list of 32 members who voted against the amendment includes five past-Chairmen of the Council and the present Chairmen of the Housing Committee, Improvements Committee and Bridges Sub-Committee.

*Municipal Reformers* (26).—Sir F. Anderton, Miss Cazalet, Sir Cyril Cobb, M.P., Capt. C. E. Cobb, E. M. Dence, Mrs. Emmet, Lady Eve, T. C. Goff, H. C. Gooch, W. W. Grantham, K.C., H. J. Greenwood, M. Hays, Miss Hill, Mrs. Hopkins, Sir G. Hume, M.P., Col. Levita, T. Littlejohns, W. F. Marchant, E. L. Meinertzhagen, R. C. Norman, Sir L. Pound, Dr. Adeline Roberts, H. V. Rowe, Capt. Swinton, Admiral Taylor, Mrs. Worsthorne.

*Progressives* (5).—H. A. Baker, Percy Harris, M.P., W. C. Johnson, R. P. Jones, Rev. J. Scott Lidgett, D.D.  
*Labour*.—E. G. Culpin.

The following letter from the President of the R.I.B.A. was published in *The Times* on 31 December:

SIR,—As President of the Royal Institute of British Architects I wish to place on record our deep regret at the decision of the London County Council to destroy Waterloo Bridge.

The Institute many months ago convened a conference of all the societies interested in the preservation of the bridge, and obtained professional engineering advice by which it was distinctly shown that it could be saved by underpinning, and at a later period urged that the matter in dispute should be referred to the First Commissioner of Works and that he should be asked to appoint an independent expert commission to report upon it.

Such a course was, indeed, advocated by the Bridges Sub-Committee of the London County Council, and, if adopted, would have satisfied that great body of public opinion which, as the correspondence in your columns indicates, is profoundly concerned at the threatened loss of one of our greatest national monuments.—I am, &c.,

E. GUY DAWBER.

The following letter by the Hon. Secretary R.I.B.A. was published in *The Times* on 4 January in reply to a plea by the Bishop of Woolwich for the consideration of the traffic problem in connection with the present bridge.

SIR,—The Bishop of Woolwich, in his letter to *The Times* of 28 December, appears to think that Waterloo Bridge can only be preserved at the cost of discomfort to the thousands who pass daily from one side of the river to the other.

Does he realise (1) that all the advocates of the preservation of Waterloo Bridge are keenly alive to the necessity for more adequate river crossings; (2) that it will cost little more to mend the present bridge than to pull it down; (3) that a new bridge in a better traffic position would in the long run cost little more than the rebuilding of the present bridge; and (4) that the congestion at the Strand crossing caused by a widened Waterloo Bridge would become intolerable?

This is not merely a question of aesthetics. The present bridge can be made safe for a thousand years. This, plus a new bridge in a better traffic position, would give, not six, but nine lines of traffic across the river, and would save the present guardians of the bridge from the possible stigma not only of vandalism, but also of waste of public funds.—Yours, &c.,

E. STANLEY HALL,

Hon. Secretary R.I.B.A.

\*\*\* Since the decision of the L.C.C. a large number of letters have appeared in *The Times* expressing dissatisfaction with the decision and the hope that the bridge may yet be saved. Amongst these appear the names of Sir Frank Dicksee, P.R.A., Mr. Arthur Keen, Sir Wilfrid Stokes, Professor W. R. Lethaby, Professor Arthur M. Hind, Mr. C. J. Holmes, Sir William Bull, Professor Beresford Pite, Mr. C. H. Collins Baker, The Bishop of Southwark, F. L. Griggs, A.R.A., etc.

## Correspondence

R.I.B.A. FORMS OF CONTRACT.

61, South Molton Street,  
London, W.1.

14 December, 1925.

The Editor, JOURNAL, R.I.B.A.





DEAR SIR,—The R.I.B.A. forms of contract are very useful documents, but I venture to suggest that discrimination between the alternative agreements, with or without quantities forming part of the contract, would be made easier if, instead of a red slip attached to one of them, the agreement itself were in one case entirely printed in red.

It is not a great matter, but I have known cases where, the slip having become detached, the consequences were unfortunate, and the precaution seems so simple and obvious and so free from corresponding disadvantage that I think it worth suggesting.—Yours very truly,

EDMUND W. WIMPERIS [F.].

### "INIGO JONES AS A COLLECTOR."

With reference to Mr. Keith's article *Inigo Jones as a Collector*, published in the last issue of the JOURNAL, in order that there shall be no mistake in the identification marks which appear on the drawings, the author would like the accompanying copies to be substituted for marks 1, 2, 3 and 5 printed at the foot of the first column of his paper on page 95.

150: : 49: : 54: : 252: :

These copies are a closer representation of the actual symbols used in marking the drawings.



# The New Arterial Roads of Greater London

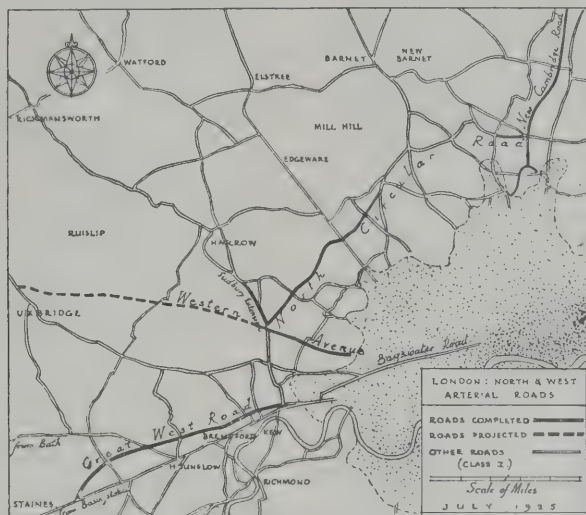
VISIT BY THE TOWN PLANNING AND ART COMMITTEES.

BY W. HARDING THOMPSON [A].

In view of the importance of the new arterial roads to the plan and architectural character of London, it was considered advisable that the Town Planning and

criticisms and suggestions as might be of assistance in any future schemes.

The first tour of inspection was made on July 18th,



Art Committees should inspect and report on those roads already completed and now under construction. As the areas covered by these roads is so great, it has been arranged to take each district in turn and make such

1925, of all the new arterial roads in the north and north-west districts of the Metropolis, and the following notes have been made thereon. The area visited is indicated on the diagram here illustrated.

## TOUR OF NEW ARTERIAL ROADS, NORTH-WEST AREA OF LONDON, JULY 18TH, 1925.

The following new roads were visited:—

- (1) Western Avenue (including the Sudbury Extension).
- (2) Great West Road.
- (3) North Circular Road.
- (4) New Cambridge Road.

The object of the tour was to ascertain:—

- (a) The value of these roads as part of London's arterial system.
- (b) To what extent proper consideration had been given to the architectural treatment of road junctions, approaches and new bridges.
- (c) The suitability of road section, grading and surface.

### THE WESTERN AVENUE.

(Length, 8 miles; total width, 120 ft.; carriage-way, 50 ft.)

This road is planned to extend from Bayswater westwards, through the exhibition grounds of the "White City," then parallel to and south of the Great Western Railway near Perivale, after which it will traverse open country until it joins the old London-Oxford Road, one and a half miles north-west of Uxbridge. Its function will therefore be to relieve the old Oxford Road of a large proportion of traffic going direct from the west

of London to the Chilterns and Oxford, and it will consequently reduce much of the existing congestion at Shepherd's Bush, Acton and North Ealing. This relief is not yet noticeable, because up to the present only short sections have been completed in Acton near the L.C.C. Housing Estate; another section north of Hanger Hill is now under construction.

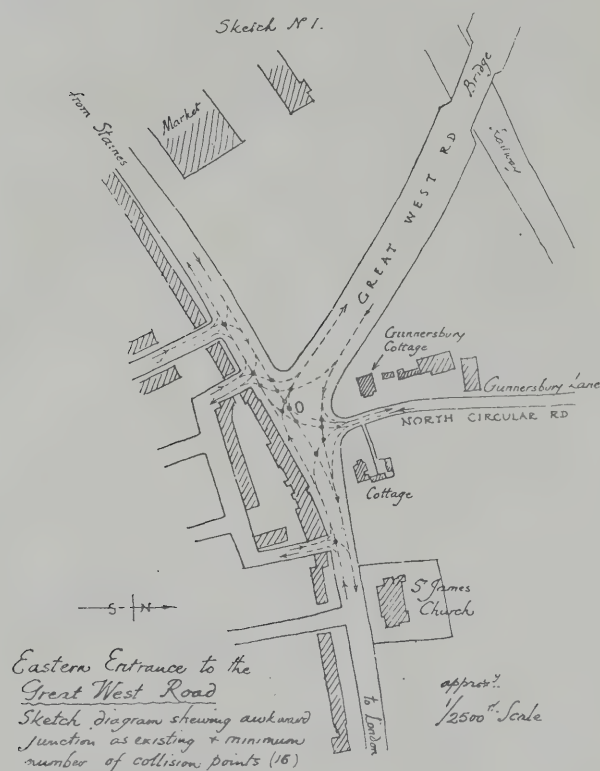
It is obvious that the Western Avenue will prove a valuable addition to London radial arteries; but it is suggested that careful consideration should be given to points where it crosses existing roads. One such point was noticed particularly, namely, immediately north of Hanger Hill, where the new road crosses the North Circular Road by the Great Western Railway. Here a small house of little value is allowed to obstruct the vision of motorists going south to Hanger Hill.

In Buckinghamshire, north of Uxbridge, it will probably be necessary to build three bridges to carry the new road over the rivers and canals; these should possess an architectural character worthy of a great approach road to the capital.

It is also very important that if the Western Avenue be connected with the Marylebone Road, great care should be taken with the articulation, so that it will have directness and dignity.

## THE GREAT WEST ROAD.

This road, already completed, undoubtedly provides a much-needed alternative route to the very congested Brentford High Street. Traffic from London to the Bath Road can now avoid Brentford by this by-pass; similarly travellers to Staines and Basingstoke need not proceed through two congested points at Brentford, and Hounslow.

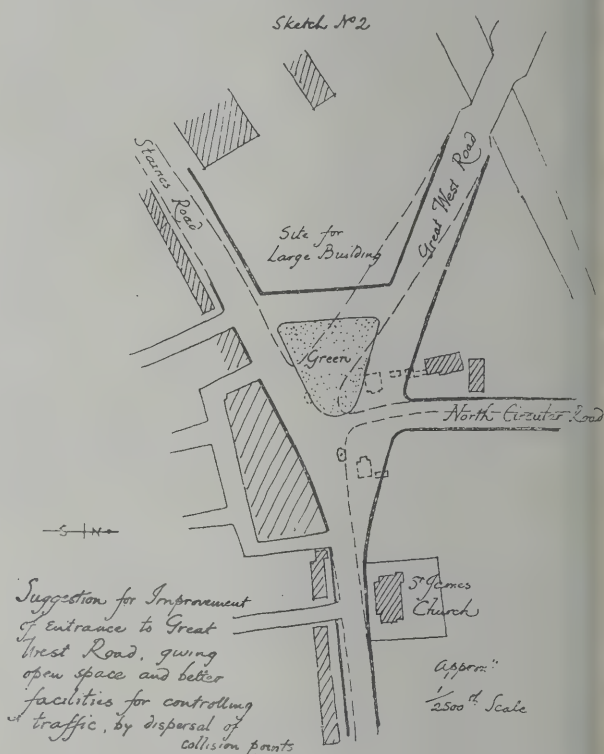


A just criticism can be made of the Great West Road regarding the very inadequate junctions at the eastern (Brentford) end, and also where it crosses the Bath Road. Particularly at the first-mentioned place, a splendid opportunity has been missed for designing a great traffic centre, which would not only be "foolproof" for the motorist, but of such a shape as to receive three very important arteries, as well as to minor streets.

After traversing open country as a dignified modern highway, the Great Western Avenue joins the old road in such an indecisive manner that motorists going west frequently keep to the old congested highway in preference to the new route. The diagrammatic sketch above shows the road junction as existing, with collision points indicated (assuming single lines of traffic in each direction). The second diagram shows a suggestion for a more architectural treatment by the sacrifice of only two cottages, one on each side of Gunnersbury Lane. The latter now forms part of the North Circular Road, and it is therefore of sufficient importance to justify a more architectural lay-out where it cuts the Great West Road.

## THE NORTH CIRCULAR ROAD.

This is intended to provide a circumferential route north of the Metropolis through Essex and Middlesex, and extending from the Thames Ferry at Woolwich in the east to Kew Bridge in the west. Considerable lengths of existing roads are utilised, such as East Ham High Street; Wadham Road, Walthamstow; Angel Road and Silver Street, Edmonton; Hanger Lane, Ealing and Gunnersbury Lane, Brentford.



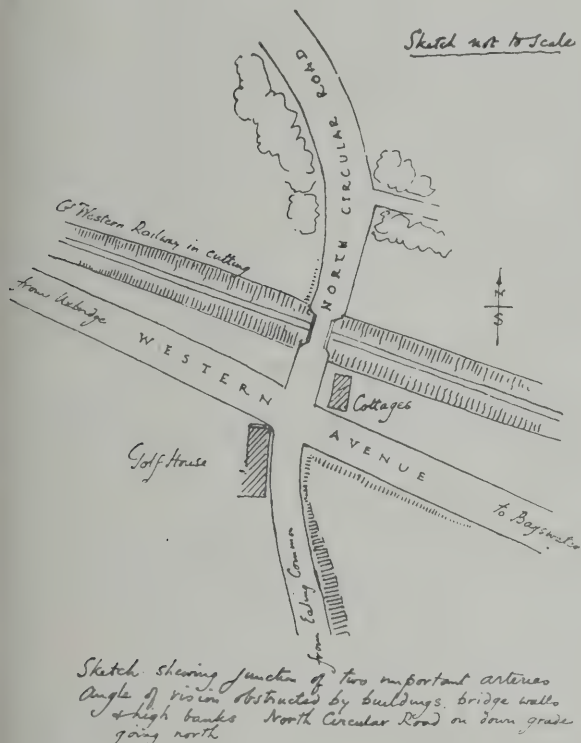
The sections inspected comprised the western half of this road, i.e. from Chiswick (where it intersects the Staines Road at the eastern end of the Great West Road) as far as the new Cambridge Road. The work in this section has been carried out by the Middlesex County Council, and the completed portions have a width between fences of 100 ft., a single 24 ft. concrete carriageway, with space left for the subsequent formation of a second carriageway, two gravel footways and wide verges between the carriageways and also between the footways and carriageways.

The most interesting section, consisting of an entirely new road, follows the Brent Valley on an admirable line south of Brent Reservoir, cutting the Edgware Road near "The Old Welsh Harp" and so proceeding north-west on an existing road of increased width. Great possibilities for an attractive development are inherent along the shores of the reservoir, and it is suggested that the lake frontage between the new road and the water should be kept open at all costs. Already a factory has been quite recently erected where the North Circular Road



crosses the Edgware Road, which is an unfortunate location for industries in view of the fact that the high ground on the 200 ft. contour offers such a splendid site for residential development north of Dollis Hill.

East of Welsh Harp the North Circular Road follows the valley of the Mutton Brook to the Finchley Road, where this junction is capable of improvement, and farther north, near "Tally Ho Corner," a sense of direction is lost owing to the difficulty in finding the road



for Friern Barnet and Edmonton. It is suggested that before reaching the New Cambridge Road, where the North Circular route runs parallel to Pymmes Brook, an attempt should be made to reserve the land between the road and brook for the public. This is one of the few points where this road might acquire the character of a parkway.

THE NEW CAMBRIDGE ROAD.

This route gives considerable relief to the old highway to Cambridge. Here again a small public garden or green might have been contrived at the junction with the North Circular and other roads, where there is a somewhat unimaginative lay-out.

## CONCLUSIONS.

There appears to be a tendency to design new arterial roads rather as railroads were planned in the nineteenth century, as tracks for high-speed vehicles, yet without most of the safeguards provided by the railway companies at crossings. If the new motor roads are to be used for pleasure as well as business, it is suggested (a) that a national system of signs should be established for road crossings to warn the by-road users that they are approaching a main road.

(b) That when the new roads pass through "Town Planning Schemes," powers given under the Act should be exercised to control the architectural character of buildings fronting on to these roads.

(c) That skilled architectural advice should be employed in the design of "traffic centres," bridges and viaducts.

(d) That funds should be reserved for tree planting on carefully selected sections.

(e) That when roads pass through open country and semi-rural districts, the road section should be designed in sympathy with the surroundings. Large granite curbs enclosing green verges, iron railings and crude bridges of concrete, do not possess a character suitable for a rural environment. In cases where roads pass through urban areas the design and general layout should have a more formal and dignified character.

(f) That in order to avoid monotony and at the same time to provide recreation grounds easily accessible, a series of roadside spaces should be preserved, either as "common lands" or fenced in for organised games. (The "Playing Fields Association" might co-operate in this respect.)

(g) That the road surface should generally be the most suitable for motor traffic, but that at points where the gradient is unavoidably steep, provision should be made at the side for a rougher surface necessary for horse-drawn vehicles.

(h) That trams should only be permitted in suburban areas, and wherever possible should run on sleepers in a separate grass track, with definite halting-places.

(i) Finally, these Committees consider that, in designing important arterial roads, care should be taken with the planning of branch roads, so that full use can be made of the trunk roads by the surrounding congested and inaccessible areas.

## Leonard Aloysius Scott Stokes, President R.I.B.A., 1910—1912

## Two Personal Reminiscences

(1) BY WALTER J. N. MILLARD [F.].

It falls to the lot of an old friend of nearly fifty years' standing to put together a few words in reminiscence of a fellow student in architecture, Leonard Stokes. To repeat an already told story, our first encounter was in "the late 'seventies," at the Architectural Association, where, as chairman for the evening of the Class of Design I could not help noticing how the proceedings were enlivened by the frank criticism of designs lying on the table, freely offered—with all due respect to the chair—by a slim, fair-haired youth of bright and engaging appearance. Having ascertained his name, I kept it in mind; so, when, some twelve months later, my master, Mr. Street, called me to him and told me that Mr. Leonard Stokes would be entering the office in a few days' time, I was not completely in the dark as to our prospective comrade, though I did inquire of the office downstairs, "Who's Leonard Stokes?" His coming was felt in the office as a gentle breeze, so to speak; yet his breeziness was by no means of the swelled-head variety. Before long Stokes and I found ourselves working alongside one another not only in the office but also outside, in the Architectural School of the Royal Academy and elsewhere; but we drilled apart as volunteers in different rifle corps. Then we sailed forth on our travels together, at home and abroad; went sketching, as we termed it. With Stokes in an office or a school, at a conclave of choice spirits, or on an outing, dull moments were rare. Were it merely a discussion, he would provoke that! So, too, would he be one to raise the laugh. During his boyhood, I was told, he had been anything but robust. With maturity strength and high spirits seemed to have come, and there developed a personality that made its impression wherever he went. A remark made to me in those young days by one old enough to be a grandfather to Stokes, after meeting him for the first time, was, "What a bright intelligent fellow! It's a real pleasure to have a talk with such a man." Book knowledge and class-room learning of architecture were not much in Leonard Stokes's line; and I sometimes think how fortunate it was perhaps that, coming just when he did, he missed both compulsory examination and our up-to-date courses of education in the profession. During his youthful days he would have been a rebel, I fear, against both, had they then been in force. As it fell out, he contrived to pick up his knowledge of things needful as he went along, from architect's office to quantity surveyor's office, and then from clerk of works-ship back to architect's office and academy school, observing keenly all the time how others set about their work and brought it to conclusion. He was a *bona fide* student, who meant business, and did want to learn—not merely to be told something. Though hardly to be described as deeply read in architectural lore, even as young architects went in those days, he was wide awake to most things that mattered; and furthermore he seemed rarely to be far out in his measure of men. He had a way of seeing through one. I have never known him to be moved, by fine writing or talk, to take up whole-

heartedly with unsound projects, put forward, though they might be, by the very best meaning of honest enthusiasts. In the sketching of building forms he would give his mind to worrying out on paper the make of a thing rather than to producing a picture of it fair to look at; and I doubt whether his own handiwork in a sketch ever, of itself, afforded him particular satisfaction. As a rule, his drawing was done not for the pleasure of it, or for show, but for practical purposes; either for his own enlightenment as a student of building work or by way of instruction to others in the carrying out of his intentions. At times, in fact, Stokes's outdoor sketching was accompanied by no little tribulation, especially to begin with. Whilst at work in company with others the cry from him might be heard—"Oh! I can't sketch, I shall give up the *Perfection*." But we knew better. He was not one to give up or give in. Certainly he was not altogether a docile learner. Unfeelingly we would laugh and concentrate our energies on tackling own immediate difficulties, knowing that in his case time would work a cure. In effect, a little wholesome neglect acted on Stokes as a tonic. This was illustrated when, in the summer of 1879, we set to work together on making measured drawings of the wall arcading in the Lady Chapel at Ely, a piece of work of some intricacy. I was the first to tire of our joint undertaking. With what Stokes regarded as shameless expedition I got through as much of the measuring and taking of full-size details as I cared for and then went on to indulge in the making of a tinted sketch of the work in perspective, leaving him to get along as he could, single-handed. Whereupon he reproached me, not unjustly perhaps, with some bitterness, for leaving him in the lurch; nevertheless he doggedly stuck to his job, and in the end turned out, as it were in very spite, a set of drawings that must have largely influenced the Prizes Committee of the R.I.B.A. in awarding him the Pugin Studentship of the following year. Few men perhaps have recognised their own limitations better than Stokes, with his liberal endowment of sheer good nature and strong undercurrent of common sense. One marked characteristic of him was the quality of fortitude, by which he was nerved to face difficulties and responsibilities that came early in his career. His uncompromising fearlessness and unconventional habit of mind constituted him no respecter of persons, especially of "big-wigs" or "brass-hats" if headgear only had to be considered; whilst, in the case of what might strike him as deficiency in intelligence on the part of others, he would scarcely be accounted to have won the crown for suffering gladly. His bright and adventurous spirit primed him with self-reliance and courage to face work ahead, come what might. Bright as he could be, at all sorts of times, he could also go to the other extreme. Then, for the moment, the sky became gloomy indeed, but soon the clouds were dispersed by the inner force of a strong will under control.

Leonard Stokes was not one to be slow in responding to



what he believed to be a call of duty. In 1882 he was with me in Florence when, without previous warning, I think, the summons came for his immediate return to England, in order to take up his first commission as a practising architect, viz., a new church, to be built in a provincial city. He started for home that evening, apparently without much eagerness at the prospect, but clearly resolved to rise to the occasion as best he could. Years afterwards I

(2) BY GEORGE DRYSDALE [F.].

I understand Mr. Millard is writing to you about Mr. Stokes's young days as an architect and I am sure Mr. Stokes would have desired no one other. May I add a few words, my claim being based on having seen almost as much as anyone of him since the early days of this century, being lucky enough to go to him as a pupil and receiving during my pupilage very kind attention. To the pupil: every day one criticism, often more than one, in what were for him very busy days; no idleness allowed, strict attention to work, either in the office or outside, visiting work or sketching and measuring. Times that were often exciting, the small daily worries of an office not easily overcome by a temperament such as his. Hot as his temper was, the cooler moments came soon afterwards and the mutual forgiveness. One always felt that he was out for the best, that he did not mean half he said; one could not help but admire his keenness and quickness, the tremendous care he took with his work and the eagerness with which he hurried

heard him say, in public, that he, like too many of us, had the misfortune to begin independent practice years too early—ten years, I fancy he put it at. Even so, he never turned back. Practice kept coming to him and he did not fail to stand the test. He "made good." By and by, the time came when we saw that he had been found out for what he was, and presently, by general consent, he took his rightful position as a leader amongst us.

to his board on entering the office. It is hardly for me to write here of the quality of his work. I might quote from the words of one who knows on seeing the exhibition of photographs and drawings at the R.I.B.A. on the occasion of the presentation of the gold medal. These were to the effect that the most remarkable thing about the work was its continuity. From start to finish, the effort of an original mind working out its own problems in its own way. Or again, the words of a former Lord Mayor of London: "The most remarkable thing about Mr. Stokes is his extraordinary care of the smallest detail."

Since the war pain has been constant with him. He hardly complained, generally joking of his growing incapacity of movement. His limbs refused to act, he had difficulty even in speaking. Yet he insisted, until a fortnight before the end, on coming twice a week to the office, to the last determined to carry on.

His pluck was enormous and his patience wonderful.

Leonard Aloysius Scott Stokes was the son of Scott Nasmyth Stokes, Inspector of Schools, and the brother of two men both of whom have become eminent, Sir Wilfrid Stokes, K.B.E., the engineer, and Mr. Adrian Stokes, R.A., the painter. The training which he received was much more severely practical than that of most of the men who have distinguished themselves on the artistic side of their profession, and must have been of great advantage to him in his everyday work. Coming to London in 1871, he was articled to S. J. Nicholl, in whose office he remained for three years, going from there to the office of James Gandy, a quantity surveyor. After this useful experience he gained further practical knowledge by acting as clerk of the works to G. E. Street, who was at that time restoring Christ Church Cathedral in Dublin, which has been described as "one of the most careful of Street's 'restorations' and one of the best examples of nineteenth century Gothic." He worked later under Colcutt and under Messrs. Bodley and Garner.

As he was a member of a Roman Catholic family and had experience of ecclesiastical work under such famous men as Street and Bodley, it is not surprising that much of his work was for Roman Catholic communities. Among his ecclesiastical work may be mentioned All Saints' Convent, near St. Albans; an extensive new wing to Scot Priory; a convent at Lynton for the Poor Clares; and the Church of St. Clare, at Sefton Park, Liverpool; and the chancel of the Sacred Heart at Exeter, his earliest

work, carried out in conjunction with Ware, of Exeter; and Roman Catholic churches at Folkestone, Maidenhead, Southampton, Peterborough and Sudbury. He was also the architect of the Roman Catholic Cathedral at Georgetown, Demarara. One of the finest of his designs was one made in 1892, for a church at Miles Platting, a suburb of Manchester.

Of a different order was his work for the National Telephone Company, for which he built a number of exchanges, not only in the provinces, at Reading, Southampton and many other places, but also in London, at Paddington, Dalston, and, in 1908, in Gerrard Street. He was also the architect for Chelsea Town Hall. At Cambridge he was responsible for the new quadrangle at Emmanuel College; at Oxford he built, for the School Board, the Central Girls' School; at Lincoln, the Grammar School; and near Bath additions to Downside College. For Lord Digby he built Minterne House, Dorset, and he also designed Shooters' Hill House at Pangbourne. He was also one of the architects selected to compete for the abortive Holborn-Strand Improvement Scheme, an attempt to provide the new Kingsway and Aldwych with some uniformity of façade.

In 1889 he became President of the Architectural Association, and took part in establishing the evening classes there. He gained, in 1880, the Pugin Studentship. For the years 1910-12 he was President of the Royal Institute of British Architects, and in 1919 received the distinction of the Royal Gold Medal for Architecture; he

also received a silver medal for architecture at the Paris Exhibition of 1900. He was appointed in 1908 a member of the Royal Commission on Historical Monuments (England), and was a member of the Committee for the King Edward Memorial. He married, in 1898, Edith, daughter of Mr. W. E. L. Gaine, for many years general manager of the National Telephone Company, and leaves two sons and two daughters. Mrs. Stokes was made C.B.E. for her work in the war.—*Extract from The Times.*

#### MEMORIAL SERVICE.

A Requiem Mass was sung at the Servite Church, Fulham Road, on the 30th December, Fr. Moore being the celebrant. The principal mourners included:—Mrs. Stokes (widow), Mr. Adrian Stokes (son) and Mrs. Stokes, Mr. David Stokes, Mrs. Gaine, Mr. and Mrs. Gordon, Mr. and Mrs. Hawkings, Major Stokes, the Misses Stokes, and Mr. H. F. Scott Stokes. Among others who attended the service were:—Mr. E. Guy Dawber (President of the R.I.B.A.), Mr. Arthur Keen (Vice-President of the R.I.B.A.), Sir George and Lady Frampton, Sir John and Lady Burnet, Sir Brumwell Thomas, Mr. R. F. Dodd Clarke, Mr. and Mrs. S. Jacomb Hood, Mr. Dowling, Mr. J. Dowling, the Misses Harvey, Mr. Julius Olsson, R.A., Mr. Hubert Hull, Mr. Drysdale, Mr. N. Morrison, Mr. E. P. Warren, Mr. Campbell Jones, Mrs. Stanton Coit, Mr. and Mrs. Frank Green, Mrs. Alec Wally, Mr. D. B. Niven, Mr. Francis Hooper, Mr. William Woodward, Mr. John B. Lofting, Mr. Bartlett, Colonel Strange, Mr. T. Marhew, Mr. and Mrs. Charles Evans, Mr. and Mrs. Harry Lewis, Mrs. Bendix, Mr. Steinberg, Mrs. Charles Anderson, Mr. McAlister (secretary R.I.B.A.), Captain and Mrs. O'Connor, Mr. S. R. Pirrie, Dr. Schidrowitz, Mr. Wimperis, Mrs. Wickwar, Mr. A. W. S. Cross, Mr. and Miss Laing, Mrs. Edgar Lambart, Mr. Julian Lambart, Mr. George H. Duckworth (representing the Royal Commission on Historical Monuments), Mr. Roskill, K.C., Mrs. Roskill, Mr. Ashton W. Roskill, and Mr. and Mrs. Harry R. Lewis.

The burial took place at Mortlake.

#### ANNUAL COMPETITION OF INDUSTRIAL DESIGNS.

The Royal Society of Arts have issued the conditions of the third annual competition of industrial designs which will take place in June 1926. It will be open to two classes, (a) all British subjects (with certain specified limitations as to age) in the Section of Architectural Decoration, etc., and (b) British students in British Schools of Art.

The competition will be divided under the following heads:—

- (1) Architectural Decoration.
- (2) Textiles.
- (3) Furniture.
- (4) Book Production.
- (5) Pottery and Glass.
- (6) Miscellaneous.

The conditions of the competitions can be obtained from the Secretary of the Royal Society for the Encouragement of Arts, Manufactures and Commerce, John Street, Adelphi, London, W.C.2.

#### ARTS AND CRAFTS EXHIBITION.

The Arts and Crafts Exhibition Society, carrying out its policy of holding one show every three years, will open its 13th Exhibition on 16 January in the galleries of the Royal Academy. In the past the Society has been the means of showing to the public crafts newly revived or newly rescued from the degradation of the worse forms of commercialism into which the industrial revolutions and other causes had plunged them. The Society's early exhibitions laid before the public the beginning of the revival of modern printing, which was originated by William Morris, acting on the advice of Mr. Emery Walker. Cobden-Sanderson, who took up bookbinding when it was an artistically lifeless commercial proposition and left it a noble and flourishing craft, was first introduced to the public at the Society's exhibitions; Mr. Edward Johnston, too, with the revival of calligraphy. In the present exhibition two crafts will be seen which have been recently added to those dealt with by creative and productive methods as distinct from those of commercial reproduction in bulk: the illustration of books by engravings, and the printing of textiles. For too many years these have both been regarded as a field in which an artist's studio design on paper should be mechanically reproduced, without the intervention of craftsmanship in actual material.

The principle that design is not merely conditioned by material, but is inherent in it; that material is not passive, but has latent powers which it should be the object of the craftsman to discover and release into action is now no longer new. The Arts and Crafts movement is to a certain extent hindered by its own success. The less-well-advised manufacturers try to imitate in quantity production the external qualities of hand-made objects. A sham deckle edge on a machine-made paper is a humble but familiar example. Others try to find novelty and safety by what might be called photographically exact reproduction of hand-made articles. The best informed manufacturers and designers have formed societies, such as the Design and Industries Association and the British Institute of Industrial Art, to set bulk production on sounder bases and ideals.

But the movement has more insidious enemies than those of thoughtless manufacture. The most dangerous is slovenly hand-work, done under the impression that slovenliness brings out the quality of the hand as distinct from the machine.

The Society has no longer to fight to establish a new principle; it has a far more difficult and less exciting task: it has to see that principles almost generally accepted are intelligently understood and acted upon. It has to establish higher standards of achievement, and to clear the ground of the confused undergrowth which has sprung up under the shadow of its successes.

We hope to give a criticism of this year's exhibition in the next number of the JOURNAL, but owing to limitations of space much good work has unfortunately been crowded. In the meanwhile the following information may be of interest. The craftsman, originally known to us as a maker and master of puppets, has followed up his success of last exhibition with some remarkable wood, lacquered wood, and stone groups of animals.



The very high standard attained by modern typography is shown by exhibits from the two highest sources, as well as from other presses. Although Keighley Town Council has not been able to lend its War Book, that masterpiece of Mr. Edward Johnston's writing, the work of many scribes, including a well-known group, shows what is done to-day. Some examples of everyday handwriting show that even this, in the hands of the scrupulous, can be an act of graciousness. Engraved illustrations and printed textiles have been mentioned above as an almost new element in these exhibitions. Furniture, silversmithing, jewellery and stained glass are all said to be well up to the average of previous shows. Since the last exhibition the Society has lost two of its early members, Mr. A. C. Benson and Mr. Christopher Whall, the former of whom was the actual initiator of the Society. Examples of their work will be shown. N.R.

## Obituary

C. A. DAUBNEY [F.].

We deeply regret to report the death of Mr. Charles Archibald Daubney, which occurred on 14 December 1925 at the comparatively early age of 56.

Mr. Daubney was elected an Associate of the R.I.B.A. in 1901 and a Fellow in 1921. He was also a Fellow of the Surveyors' Institution.

After spending 15 years with an eminent London architect he was for about ten years in the architect's department of the London County Council, where he was engaged in connection with the provision of means of escape from buildings. Whilst there he was awarded in 1902 by the R.I.B.A. a Godwin Bursary, which enabled him to visit America and study the methods of providing escapes from commercial buildings in that country.\*

He was appointed district surveyor for Rotherhithe from 1 January 1911, an appointment which he exchanged for the district surveyorship of the adjoining district of Bermondsey on 6 April 1915. This district was enlarged to embrace the whole borough of Bermondsey as from 1 October 1920.

He was Honorary Secretary to the London Building Acts Committee of the Royal Institute of British Architects, which was constituted to consider the "Reform of the London Building Law," and in that capacity he attended a Conference in October 1923 of architects and master builders which had been arranged to consider and report on what amendments should be made to the London Building Acts. He was a valuable member of the District Surveyors' Association.

His many activities included a period of service with the Y.M.C.A. in a military camp in 1916 and he gave valuable assistance in the work of the Congregational Church at Torridon Road, Catford, with which he had been associated for many years and where his artistic abilities were exhibited in the painting of the choir windows.

The funeral service at the church was attended by seven of his brother district surveyors, whilst the staff of the architect's department of the Council was represented by some of his former colleagues, amongst whom he was held in high esteem.

## PROGRESS OF TOWN PLANNING SCHEMES.

The JOURNAL has published from time to time information supplied by the Ministry of Health regarding the progress of Town Planning Schemes in various parts of the country.

A comprehensive statement has now been received from the Ministry of Health in which a complete list of local authorities engaged in the preparation of Town Planning Schemes is given, together with the stage reached in each case on 30 November 1925. The statement deals with England and Wales only, and will be supplemented monthly by the Ministry as alterations and additions to the list occur.

As space does not permit of the publication of the comprehensive list, the latter document has been placed in the Library at the request of the Town Planning Committee of the R.I.B.A. Members who desire information as to the progress of any particular Scheme should communicate with the Secretary R.I.B.A.

## WAGES SLIPS ON TENDERS.

The Architects' and Builders' Consultation Board are desirous of ascertaining whether the Wages Slip (now affixed by contractors to tenders so as to provide for adjustment in the event of a rise or fall in wages) has had any detrimental effect upon the placing of building contracts during the past two years.

Members whose experience has led them to form any definite conclusions on the subject are requested to communicate with the Secretary R.I.B.A. as soon as possible.

## THE SPECIAL EXAMINATION

TO QUALIFY FOR CANDIDATURE AS ASSOCIATE R.I.B.A. (For applicants exempted by permission of the Council from Registration as Probationer and from the Intermediate Examination, and from submitting Testimonies of Study.)

The Council of the Royal Institute desire to call attention to an alteration which has now been made in the conditions for admission to the above examination upon the advice of the Board of Architectural Education.

Up to the present this examination has been open to architects in practice not less than 25 years of age and to chief assistants not less than 30 years of age, in accordance with the particulars stated on the official application form.

Upon the recommendation of the Board of Architectural Education, the special examination will in future be open, upon the conditions stated above, to architects in practice not less than 25 years of age and to all assistants over 30 years of age, whose applications are approved by the Board of Architectural Education.

## R.I.B.A. ALLIED SOCIETIES' CONFERENCES.

The Royal Architectural Institute of Canada has appointed Mr. Septimus Warwick, F.R.I.B.A., to attend the meetings of the R.I.B.A. Allied Societies' Conference as the London representative of the Royal Architectural Institute of Canada.

\* See R.I.B.A. JOURNAL, Vol. 10, 3rd series, pp. 55-72.

## NOTES FROM THE MINUTES OF COUNCIL

14 December 1925.

## ARCHITECTURAL EDUCATION.

On the recommendation of the Board of Architectural Education the following steps were taken :—

(a) *Reconstitution of the Board.*—The following were appointed Members of the Board :—

*Fellows.*

Mr. A. J. Davis.	Mr. H. V. Lanchester.
Mr. W. Curtis Green, A.R.A.	Mr. T. R. Milburn.
Mr. Francis Jones.	Sir Giles Gilbert Scott,
Mr. Arthur Keen.	R.A.
Mr. S. D. Kitson, F.S.A.	Mr. Walter Tapper.
Mr. A. J. Taylor.	

*Associates.*

Professor L. B. Budden.	Mr. H. Chalton Bradshaw.
	Mr. Michael Waterhouse.

*Representatives of Schools exempted from the R.I.B.A. Intermediate Examination.*

Mr. T. P. Bennett, Northern Polytechnic.
Mr. George Drysdale, Birmingham School of Architecture.

Mr. G. D. Gordon Hake, Bristol School of Architecture.
Mr. W. S. Purchon, The Technical College, Cardiff.

(b) *Intermediate Examination.*—A Bronze Medal and a sum of £5 in books will be awarded for the best set of drawings submitted at the annual exhibition of Designs of Students exempted from the R.I.B.A. Intermediate Examination.

(c) *Probationership.*—In view of the fact that the Council have decided that except in very special cases a Headmaster's Certificate shall not be accepted after 1 October 1927, and no one shall be registered as a Probationer unless that person has passed one of the recognised examinations in the required subjects, all Members of the R.I.B.A. will be circularised and informed as to the standard required for the Probationership of the R.I.B.A.

(d) *Special Examination.*—The regulations governing admission to the Special Examination are to be amended so as to permit all assistants of 30 whose applications are approved by the Board to take the Examination.

(e) *Town Planning.*—A paper on "Outline of the History and Practice of Town Planning" is to be included in the R.I.B.A. Final Examination as an alternative to the paper on Advanced Steel Construction (B2) or Hygiene (C).

(f) *R.I.B.A. (Anderson and Webb) Scholarship (£70) at Cambridge University School of Architecture.*—The following scholarship award is approved :—

First Year Scholarship (£35), Richard Frederick Henniker (Trinity Hall).

Second Year Scholarship (£35), Christopher David George Nicolson (Jesus College).

(g) *Studentship.*—Sixteen Probationers were elected Students of the R.I.B.A.

## UNIVERSITY OF LONDON.

Mr. Arthur Keen and Mr. Maurice Webb have been appointed representatives of the R.I.B.A. on the University of London Architectural Education Committee for the 12 months beginning 1 March 1926.

## RIVERSIDE AMENITIES, TWICKENHAM.

On the recommendation of the Town Planning and Housing Committee, letters were addressed to the Authorities of Twickenham, Richmond, and the Royal Botanical Gardens and the Thames Valley Joint Town Planning Committee, expressing concern at the threatened disfigurement of the riverside lands adjoining Richmond Bridge on the Middlesex side by the erection of factories.

## FOUNDLING HOSPITAL ESTATE.

In response to an invitation from the London Society, Mr. D. Barclay Niven [F.] has been appointed to represent the R.I.B.A. on a Joint Committee which has been established to assist in saving the Foundling Hospital Building (or such portions of it as it may seem reasonably possible to preserve) together with Mecklenburgh and Brunswick Squares.

## ARCHÆOLOGICAL CONGRESS IN PALESTINE AND SYRIA.

Mr. Frank Moars, Vice-President of the Edinburgh Architectural Association, has been appointed as R.I.B.A. delegate to this Congress which will be held under the patronage of the British and French High Commissioners from 2 to 23 April, 1926.

## L.C.C. DRAINAGE BYE-LAWS.

On the recommendation of the Science Standing Committee the attention of the L.C.C. (who are now engaged in revising the Bye-laws dealing with drainage, etc., comprised in the Metropolis Management Act, 1855, and the Public Health (London) Act, 1891, etc.) has been directed to the Science Standing Committee's Report of 1914. The L.C.C. have also been invited to receive a Memorandum and deputation on this matter.

## SALARIED PUBLIC APPOINTMENTS.

On the recommendation of the Practice Standing Committee a notice has been authorised for publication in the JOURNAL advising members not to apply for salaried public appointments unless the salary offered is stated in the announcement inviting applications. The Association of Architects, Surveyors and Technical Assistants have been invited to act on similar lines.

## REINSTATEMENT.

The following members were reinstated :—

As Associates : G. A. Gale, F. E. Collington.

As Licentiate : William Davidson.

## A.B.S. SCHEME OF INSURANCE.

The A.B.S. specialises in Life Assurance. In Whole Life Assurance the sum assured and bonus are payable at death and the payment of premiums normally continues throughout life. The bonuses which are usually payable with the sum assured may be surrendered for cash, applied to the reduction of future premiums or used to reduce the period over which premiums are payable. The Society is not tied to any insurance office and is prepared to offer and advise upon a wide choice of policies in leading companies. Half the initial commission is returned to the assured in the form of rebate and the other half forms a direct contribution to the Society's funds.

Please address all enquiries to the Secretary, Architects' Benevolent Society, 9 Conduit Street, W.1. Telephone: Mayfair 434.



# Notices

## THE SIXTH GENERAL MEETING.

The sixth General Meeting (Ordinary) of the Session 1925-6 will be held on Monday, 18 January 1926, at 8 p.m., for the following purposes :—

To read the Minutes of the General Meeting (Ordinary) held on 4 January 1926; formally to admit members attending for the first time since their election or transfer; to announce the names of candidates nominated by the Council for election to the various classes of membership; to read the Council's Deed of Award of Prizes and Studentships, 1926.

Mr. H. S. Goodhart-Rendel [F.] to read a criticism on the designs and drawings submitted for the Prizes and Studentships.

## R.I.B.A. REGISTRATION COMMITTEE.

Members are reminded that the meetings of the Registration Committee are being held at No. 28 Bedford Square, W.C.1, and that all communications for the Committee should be sent to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.

## ROOMS FOR ARBITRATIONS, ETC.

Convenient rooms for arbitrations, etc., are now available for hire at No. 28 Bedford Square, W.C.1, at a fee of £2 2s. per day. All enquiries with regard to vacant dates, etc., should be addressed to Mr. C. McArthur Butler at that address.

## VISITS TO BUILDINGS.

A visit has been arranged by the Art Standing Committee to take place on Saturday 23 January 1926, to the Second Church of Christ Scientist, Bayswater, and the Armenian Church, Kensington. Members desirous of taking part are requested to make early application to the Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## ANNUAL SUBSCRIPTIONS.

Members' subscriptions, students' and subscribers' contributions became due on 1 January 1926. The amounts are as follows :—

Fellows .. ..	£5	5	0
Associates .. ..	£3	3	0
Licentiates .. ..	£3	3	0
Students .. ..	£1	1	0
Subscribers .. ..	£1	1	0

## LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

## THE EXAMINATIONS.

### INTERMEDIATE.

The Intermediate Examination, qualifying for candidature as Student R.I.B.A., was held in London from 20 to 26 November, and in Leeds from 20 to 25 November.

Of the 53 candidates who presented themselves, 32 passed and 21 were relegated. The successful candidates are as follows, the names being given in order of merit as placed by the Examiners :—

- THEWLIS : EDWARD CHARLES [P. 1922], "Canonsleigh," The Cliffs, Southend-on-Sea.  
 BRIGHT : GEORGE EDWARD [P. 1924], "Heathcote," Station Road, Westcliff-on-Sea, Essex.  
 WRIGHT : GERALD RYBY HALL [P. 1922], 7 Willow Grove, Beverley, East Yorks.  
 ALEXANDER : ANDREW GORDON [P. 1923], Y.M.C.A., Tottenham Court Road, W.C.1.  
 CHEESMAN : KENNETH [P. 1925], 151 Palmerston Road, N.22.  
 BROWN : CYRIL CLEMENT [P. 1922], 15 Ashfield Terrace East, Newcastle-upon-Tyne.  
 SHORT : HAROLD [P. 1923], 53 Cowick Street, St. Thomas, Exeter.  
 BEDINGFIELD : ERIC EDWARD [P. 1922], 1 Endsleigh Street, W.C.1.  
 BOLTON : JOSEPH (Jun.) [P. 1919], Beaumont, Heaton, Bolton, Lancs.  
 CLAY : RALPH HENRY [P. 1920], Endcliffe, Esplanade, Hornsea, East Yorks.  
 CLOKE : SAMUEL DOUGLAS NEIGHBOUR [P. 1922], 19 Whiteford Road, Mannamead, Plymouth.  
 COOPER : REGINALD WILLIAM GAZE [P. 1924], "Wilstead," College Street, Long Eaton.  
 EDWARDS : DONALD THOMAS [P. 1924], St. Dunstan's, Amer-sham Hill, High Wycombe.  
 FARMER : GEOFFREY JOHN [P. 1922], 1 Roland Houses, South Kensington, S.W.7.  
 FRY : FRANCIS STEPHEN [P. 1923], 39 Walliscote Road, Weston-super-Mare.  
 GRIGG : LESLIE ARNOLD [P. 1922], 64 Queen's Road, Norwich.  
 GUY : RODERICK NELSON [P. 1924], "Dalkeith," 128 Crescent Road, South Woodford, Essex.  
 HOBBS : ATHOL JOSEPH [P. 1925], 48 Lancaster Park, Hill Rise, Richmond, Surrey.  
 HORNER : HUGH BALDWINNE [P. 1921], 31 Constantine Road, Hampstead, N.W.3.  
 KEMP : WILLIAM CHARLES [P. 1922], 2a Portnall Road, Harrow Road, Paddington, W.9.  
 MILLINGTON : CYRIL RICHARD [P. 1923], c/o Maxwell House, 11 Arundel Street, Strand, W.C.2.  
 MOWBRAY : WILLIAM BAWDEN [P. 1924], High Croft, Christchurch Park, Sutton, Surrey.  
 NEIL : CHARLES WARREN [P. 1922], "Langley," 14 Valkyrie Road, Westcliff-on-Sea.  
 REDDING : CYRIL NORMAN MERIDEN [P. 1920], Wormley, Broxbourne, Herts.  
 ROWLES : DOUGLAS LAWRENCE [P. 1923], Trondia, Beltinge, Herne Bay.  
 SCAMMELL : RODNEY QUINTON [P. 1922], 706 Coventry Road, Small Heath, Birmingham.  
 SMITH : WILLIAM WILFRID [P. 1922], 107 Buxton Road, Heaviley, Stockport.  
 TOZER : CECIL REGINALD [P. 1921], 4 Broadyates Road, S.W.18.  
 UNSWORTH : HERBERT [P. 1924], 17 Gordon Avenue, Bolton, Lancs.  
 VARLEY : HERBERT [P. 1921], Bramleigh, Blacko, near Nelson, Lancs.  
 WARDLE : LIONEL TALLENTYRE [P. 1924], 9 Long Reach, West Horsley, Surrey.  
 WATT : JOHN [P. 1925], Education Office, East Church Street, Buckie, Banffshire.

### FINAL AND SPECIAL.

The Final and Special Examinations, qualifying for candidature as Associate R.I.B.A., were held in London from 2 to 10 December.

Of the 74 candidates admitted (seven of whom took Part I only and one Part II only), 34 passed (four in Part I only and one in Part II only) and the remaining 40 were relegated.

The successful candidates are as follows:—

BLIZZARD: HENRY GEORGE [*Special*], 8 Elmwood, Welwyn Garden City, Herts.  
 BURTON: JOHN [*Special*], 71 West Parade, Mount Pleasant, Stoke-on-Trent.  
 CASTELLINO: SYLVESTER JOSEPH TRINITY [*Special*], 23 Cloncuiry Street, Fulham, S.W.6.  
 COOMBS: ROBERT EDWIN MONTAGU [*S.* 1923], Cathedral School, Llandaff, Cardiff.  
 COOPER: WILLIAM REGINALD ROYDON [*Special*], 17 New Street, Shrewsbury.  
 DANN: CLIFFORD HORACE [*S.* 1923], 66 Trinity Street, Norwich.  
 DOYLE: STANLEY HODGSON [*Special*], Calverley Chambers, Victoria Square, Leeds.  
 GRAY: CHARLES CLARE [*S.* 1922], 81 Sutton Crescent, Walsall.  
 GREEN: CHRISTOPHER [*S.* 1925], 83 Gunterstone Road, Baron's Court, W.14.  
 GREEN: RALSTON TILSLEY [*S.* 1922], 11 Dents Road, Wandsworth Common, S.W.11.  
 HARLEY: THOMAS [*S.* 1924], 17 Doughty Street, W.C.1.  
 KEMP: CECIL GEORGE [*Special*], Messrs. Lander and Kemp, Bridge Road, Welwyn Garden City.  
 KIMBER: CHARLES FRANK [*Special*], 39 Head Street, Colchester, Essex.  
 LIPSON: SAMUEL [*S.* 1925], c/o James Miller, Esq., 15 Blythswood Square, Glasgow.  
 LORD: WILFRID TURNER [*S.* 1924], 18 Park Hill, Ealing, W.5.  
 MCKEWAN: ARTHUR MALCOLM [*S.* 1922], 27 Somerset Road, Handsworth Wood, Birmingham.  
 MESSENT: CLAUD JOHN WILSON [*S.* 1920], 34 Mile End Road, Norwich.  
 \*MONTAGU: ADRIAN ALBERT VAN, c/o Messrs. Simpson and Ayrton, 3 Verulam Buildings, Gray's Inn, W.C.2.  
 MOORE: JOHN ROBERT [*Special*], 13 Acland Road, Willesden Green, N.W.2.  
 PALMER: PHILIP EVANS [*Special*], 25 Royal Avenue, Chelsea, S.W.3.  
 PARAMOR: FRANK WILLIAM [*S.* 1917], "Hillsborough," Selsdon Village, Sanderstead, Surrey.  
 PASHEN: JOHN HERBERT [*Special*], Ujiji, Mount Pleasant, Dorchester Road, Weymouth.  
 ROWSE: ERIC ANTHONY AMBROSE [*Special*], Flat 4, St. Stephen's House, St. Stephen's Square, Bayswater, W.  
 SIMPSON: DOUGLAS JAMES [*S.* 1922], 51 Downs Park West, Bristol.  
 VINE: RONALD OWEN [*S.* 1922], 7 Whymark Avenue, Wood Green, N.22.  
 WATSON: EDWIN [*S.* 1921], 86 Orchard Road, Erdington, Birmingham.  
 WILDE: GEORGE [*S.* 1922], 56 Arkwright Street, Bolton.  
 WILFORD: CHARLES EDMUND [*Special*], 56 Deepdale, Leicester.  
 WINTER: PERCY HAROLD [*Special*], 25 Pollards Wood Road, S.W.16.  
 DAY: NUGENT FRANCIS CACHEMAILLE [*S.* 1919—Part I only], 6i Grove End House, St. John's Wood Road, N.W.8.  
 KEMP: FRANCIS HENRY NORBROOK CREW [*Special*—Part I only], 15 Vernon Road, Hornsey, N.8.  
 NASH: EDWARD TINDAL ELWIN [*S.* 1925—Part I only], The Cedars, Cranford, near Hounslow.  
 SPINK: JOHN WILLIAM [*Special*—Part I only], Clarence Chambers, Kingston-on-Thames.

\* This candidate is not a British subject, but has taken the Examination for the purpose of obtaining a certificate to that effect.

REMNANT: EUSTACE ARCHIBALD [*Special*—Part II only], 82 Cecil Avenue, Wembley, Middlesex.

THE SPECIAL EXAMINATION IN DESIGN FOR FORMER MEMBERS OF THE SOCIETY OF ARCHITECTS TO QUALIFY FOR THE ASSOCIATESHIP.

The Special Examination in Design for former members of the Society of Architects to qualify for the Associateship was held in London from 2 to 7 December.

15 candidates were admitted and all passed. Their names are as follows:—

DURY: ALAN BUXTON, 5 Copthall Buildings, Copthall Avenue, E.C.1.  
 EVANS: BENJAMIN EDWARD, Rhosmaen, Queen Victoria Road, Llanelly.  
 GODBER: ALBERT EDWARD, c/o Senior Works and Buildings Officer, Halton Camp, Bucks.  
 JENKINS: FREDERICK URIAH, c/o Sir Aston Webb, R.A., and Son, 19 Queen Anne's Gate, S.W.1.  
 JUNIPER: FREDERICK, 67 Havelock Street, Aylesbury, Bucks.  
 MOULDING: LEWIS GEORGE, 107 Broadwater Road, Tottenham, N.17.  
 PASCOE: HERBERT, 5 Scholemoor Avenue, Lidget Green Bradford, Yorks.  
 PHAYRE: HAROLD, 29 Coton Crescent, Shrewsbury.  
 PRICE: WILLIAM JOSEPH, 14 Brent Way, Church End, Finchley, N.3.  
 ROBSON: ROBERT DAVID, County Architect's Department, Kingsbury Square, Aylesbury, Bucks.  
 ROWE: HAROLD BERTRAM, "Ruskin," Brynhyfryd Avenue, Newport, Mon.  
 SIMPSON: ISAAC ALEXANDER, "Cotta," 12 Mossiel Avenue, Ainsdale, Southport.  
 SMITH: HARRY WILLIAM, 27 George Street, Oxford.  
 TAYLOR: CAPTAIN FREDERICK JOHN, 69 Rue Verte, Rouen, France.  
 TUTTON: ALWYNE, 50 Wrotham Road, Gravesend, Kent.  
 EXAMINATION IN PROFESSIONAL PRACTICE FOR STUDENTS OF RECOGNISED SCHOOLS EXEMPTED FROM THE FINAL EXAMINATION.

14 candidates were admitted to this Examination, which was held on 8 and 10 December and all passed.

Their names are as follows:—

ALABASTER: JOHN RICHARD (University of London).  
 BRADDOCK: HENRY (Architectural Association).  
 CURRIE: MURDOCH (Glasgow School of Architecture).  
 LLEWELLYN-MORGAN: GUY LESLIE (University of London).  
 McCONNEL: KENNETH HAMLYN (University of Sydney).  
 MARTIN-SMITH: DONALD FRANK (Architectural Association).  
 MORRIS: ALEXANDER GEORGE (Architectural Association).  
 MOSELY: EDNA (Architectural Association).  
 PATKER: PURUSHOTTAM MUKUND (University of London).  
 PHILLIPS: HERBERT GORDON (University of Liverpool).  
 POUCHKINE: BARBARA (University of London).  
 RITCHIE: THOMAS (Architectural Association).  
 THOMAS: BRYAN WILLIAM RYLANDS (Technical College, Cardiff).  
 WELSH: OLIVER MARTIN (University of London).

## Competitions

### ENLARGEMENT OF WISBECH TOWN HALL.

The President of the Royal Institute of British Architects has nominated Mr. W. H. Ansell, F.R.I.B.A., as Assessor in this competition.



**BLACKPOOL MEMORIAL CLOCK TOWER.**

The Corporation of Blackpool invite competitive designs for a Clock Tower with drinking fountain, to be erected in the new park. Assessor, Mr. E. Bertram Kirby, O.B.E. [F.] Designs to be sent in not later than Saturday, 13 February 1926. Conditions may be obtained from The Town Clerk, Town Hall, Blackpool, by depositing £1 is., which will be returnable if a *bona fide* design has been submitted.

**MANCHESTER TOWN HALL EXTENSION.**

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

**PROPOSED NEW PARISH CHURCH, NEWBRIDGE, MONMOUTHSHIRE.**

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members are advised to take no part in the competition.

**COMPETITION FOR LARGER OFFICES.****WEST BROMWICH PERMANENT BENEFIT BUILDING SOCIETY**

The President of the Royal Institute of British Architects has nominated Mr. W. Alexander Harvey, F.R.I.B.A., as assessor in this competition.

**TOPSHAM PUBLIC HALL COMPETITION.**

Premiums of £50, £40 and £30 respectively are offered in the above competition. Assessor, Mr. Walter Cave [F.] Last day for questions, 1 January 1926. Designs to be sent in by 1 April 1926. Conditions may be obtained from the Clerk to the Parish Council, Topsham, by depositing £1 is.

**BIRKENHEAD NEW ART GALLERY COMPETITION.**

Proposed new Art Gallery and Museum, Birkenhead. Premiums offered £250, £175 and £100 respectively. Assessor, Sir Robert Lorimer, A.R.A., R.S.A. [F.] Competition restricted to competitors practising as architects and being resident, or having an office within twenty miles of the Birkenhead Town Hall for the twelve months at least prior to 1 January 1924. Conditions may be obtained from E. W. Tame, Town Clerk, Birkenhead, by depositing £2 2s.

**INTERNATIONAL COMPETITION.**

The Fédération Internationale du Bâtiment et des Travaux Publics are organising an International Competition with a view to promoting and facilitating the construction of houses for the middle classes and intellectual workers. Prizes to the value of 500 dollars, 300 dollars and 200 dollars are being offered by Mr. Willard Reed Messenger, engineer, of New York, for a memorandum, either in English or French, not exceeding 5,000 words, accompanied by sketches. Particulars of the competition have been deposited with the Secretary R.I.B.A. and can be obtained on application to him at No. 9 Conduit Street, London, W. •

**RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.**

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

**LEAGUE OF NATIONS.****COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.**

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

**PROPOSED NEW COLLEGE BUILDINGS, LIVERPOOL COLLEGE.**

Proposed new College Buildings to be erected on a site in Queen's Drive, Mossley Hill, Liverpool. Assessor, Sir Giles Gilbert Scott, R.A. Premiums £500, £300 and £200 are offered. Last day for questions, 30 September 1925. Conditions may be obtained by depositing £2 2s. Designs to be sent in not later than 1 January 1926.

**AUSTRALIAN WAR MEMORIAL—CANBERRA.**

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon,

on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

#### PROPOSED BRANCH LIBRARY FOR GABALFA.

Proposed branch library to be built on a site in St. Athan Road, Gabalfa. Assessor, Mr. Sidney K. Greenslade [*F.*]. Premiums, £75, £50 and £30 are offered. Last day for questions, 7 December 1925. Designs to be sent in not later than 12 noon on 16 January 1926. The competition is limited to properly qualified architects within the City of Cardiff. Conditions may be obtained from Harry Farr, Librarian, Central Library, Cardiff, by depositing £2 2s.

## Members' Column

#### APPOINTMENT VACANT.

AN old-established firm of Architects in Manchester has an opening for a young Associate desirous of commencing practice.—Apply Box No. 6126, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

#### CHANGES OF ADDRESS.

MR. PERCY V. BURNETT begs to notify that he has removed his offices from 94 Jermyn Street to 107, Jermyn Street, St. James's, S.W.1. The Telephone number remains the same.

MR. CECIL JACOB EPRILE begs to notify you that he has removed his offices from 94 Jermyn Street to 107 Jermyn Street, St. James's, S.W.1. The telephone number remains the same.

MR. E. BERRY WEBBER, A.R.I.B.A., has changed his office address to 2 New Square, Lincoln's Inn, W.C.2. (Telephone, Central 5052.) His private address is now 2 Chepstow Place, W.2.

#### MR. R. LANGTON COLE [*F.*].

MR. R. LANGTON COLE [*F.*] has retired from the Stock Exchange as from 31 December. All correspondence relating to the premises of the Exchange should in future be addressed to Mr. G. I. Buckingham, Surveyor of Works, at 23 Throgmorton Street, E.C.2. Mr. Langton Cole has opened an office at Abbey House, Westminster, S.W.1. (Telephone, Victoria 6678.)

#### ROOM TO LET.

ASSOCIATE has single room to let on third floor, within two minutes of Piccadilly Circus, at a moderate rental, including all usual services.—Apply Box No. 3025, c/o Secretary, R.I.B.A., 9 Conduit Street, W.1.

#### ACCOMMODATION OFFERED.

ARCHITECT with good offices in W.C. District offers part use of good room with telephone extension, for small rent and part time help. Electric light, heat and general service of clerk included.—Reply Box No. 3136, c/o Secretary, R.I.B.A., 9 Conduit Street, W.1.

#### OFFICE REQUIRED.

SMALL private office required, £30 to £35 p.a., inclusive, W.C. or S.W. district. Full particulars to Box No. 2126, c/o The Secretary R.I.B.A., 9 Conduit Street, W.1.

#### PRACTICE WANTED.

WELL experienced London A.R.I.B.A. would like to purchase a small share of live practice with senior contemplating retirement in due course. Substantial capital available. Apply Box No. 1126, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

## Minutes V

#### SESSION 1925-1926

At the Fifth General Meeting (Ordinary) of the Session 1925-26, held on Monday, 4 January 1926, Mr. E. Guy Dawber, F.S.A., President, in the chair. The attendance

book was signed by 30 Fellows (including 8 Members of the Council), 17 Associates (including 1 Member of the Council), 8 Licentiates, 3 Hon. Associates, and a very large number of visitors.

The Minutes of the Meeting held on 14 December 1925, having been taken as read, were confirmed and signed by the President.

The Hon. Secretary announced the decease of: Leonard Aloysius Scott Stokes, elected Associate 1882, Fellow 1889, Pugin Student 1880, President of the Royal Institute during the Sessions 1910-1912, and recipient of the Royal Gold Medal in 1919. Vice-President 1905 to 1909; Member of Council 1890-1892, 1898-1904 and 1909-1910 (also as President 1912-1913); Member of the Board of Architectural Education 1904-1913; Competitions Committee 1897-1901, 1911-1912; Prizes and Studentships Committee 1897-1901, 1909-1910; Executive Committee of the Town Planning Conference in 1910, and of the Seventh International Congress of Architects, 1906 and of numerous other Institute Committees of the Architectural Association from 1889-1891.

Benjamin Ingelow, elected Fellow 1882; Member of the Council from 1893-1899, Board of Examiners from 1889-1910, Literature Standing Committee from 1887 to 1904, and Prizes and Studentships Committee from 1893 to 1910.

Sir William Hamo Thornycroft, R.A., elected an Hon. Associate in 1910.

William George Cooke, elected Associate in 1880.

Thomas Merrison Garrod, elected Licentiate in 1911.

And it was resolved that the regrets of the Royal Institute for the loss of these members be recorded in the Minutes.

The following members attending for the first time since their election or transfer were formally admitted by the President:—

Mr. Wilfrid Bond [*F.*].

Mr. Ellis Marsland [*F.*].

Mr. W. J. Allcorn [*A.*].

Mr. E. F. Gilman [*L.*].

Mr. F. C. Wakeford [*L.*].

Dr. D. H. S. Cranage [*Hon. Assoc.*].

Professor J. E. A. Steggall [*Hon. Assoc.*].

Sir Charles A. Nicholson, Bart., M.A.Oxon., [*F.*] and Sir Francis Fox, J.P. [*Hon. Assoc.*], having read Papers "Lincoln Cathedral," and illustrated them by lantern slides, a discussion ensued, and on the motion of the Very Rev. T. C. Fry, D.D., Dean of Lincoln, seconded by Mr. B. Mott, C.B., a vote of thanks was passed to Sir Charles Nicholson and Sir Francis Fox by acclamation, and was briefly responded to.

The meeting closed at 9.50 p.m.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to the method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

#### R.I.B.A. JOURNAL.

Dates of Publication.—1925: 7th, 21st November; 5th, 19th December. 1926: 9th, 23rd January; 6th, 20th February; 6th, 20th March; 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

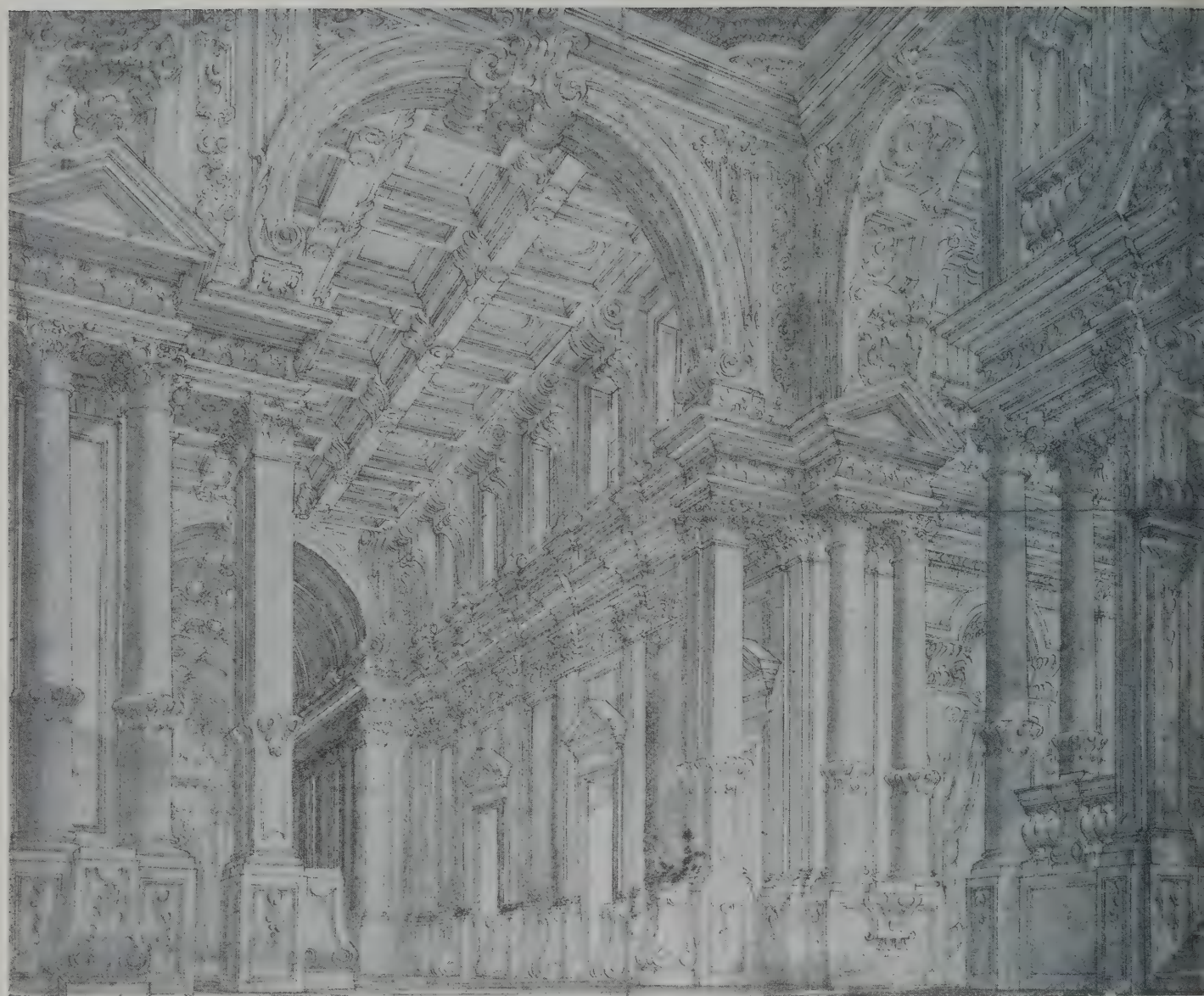
VOL. XXXIII. No. 6

THIRD SERIES

23 JANUARY 1926

## Contents for 23 January 1926

	Page
DRAWING by F. GALLI DA BIBIENA .. .. .	<i>To face</i> 159
LINCOLN CATHEDRAL. By Sir Charles Nicholson and Sir Francis Fox .. .. .	159
Discussion .. .. .	178
REVIEW OF THE WORK SUBMITTED FOR THE PRIZES AND STUDENTSHIPS 1926. By H. S. Goodhart-Rendel .. .. .	180
Vote of Thanks .. .. .	188
THE THIRTEENTH EXHIBITION OF THE ARTS AND CRAFTS EXHIBITION SOCIETY. By A. R. Powys .. .. .	189
BOARD OF ARCHITECTURAL EDUCATION : Opening Address by Mr. Maurice E. Webb .. .. .	191
CORRESPONDENCE :	
THE CONDITION OF THE BUILDING INDUSTRY. By Henry A. Mackmin, James Ransome and R. Langton Cole .. .. .	191
THE WEATHERING OF STONE. By Laurence A. Turner .. .. .	192
R.I.B.A. FORMS OF CONTRACT. By W. E. Watson and F. J. Cooke .. .. .	192
PARIS EXHIBITION AWARDS .. .. .	193
ALLIED SOCIETIES :	
MANCHESTER SOCIETY OF ARCHITECTS .. .. .	193
R.I.B.A. PRIZES AND STUDENTSHIPS : Deed of Award .. .. .	194
EXAMINATIONS : Final Examinations : Alternative Problems in Design .. .. .	195
NOTICES .. .. .	197
LECTION OF MEMBERS .. .. .	197-198
COMPETITIONS .. .. .	199
MEMBERS' COLUMN .. .. .	200
MINUTES .. .. .	200



FROM AN ORIGINAL DRAWING BY F. GALLI DA BIBIENA  
From the R.I.B.A. Collection





GENERAL VIEW OF CATHEDRAL FROM CITY WATER TOWER

## Lincoln Cathedral

BY SIR C. NICHOLSON [F.] AND SIR FRANCIS FOX [*Hon. Associate*].

[*Read before the Royal Institute of British Architects on Monday, 4 January 1926.*]

### Part I

BY SIR CHARLES A. NICHOLSON, BART., M.A.

THE general history of Lincoln Cathedral is, I suppose, familiar to most of us. The oldest parts of the present fabric forming the sub-structure of the west front, are the work of Bishop Remigius and date from the first few years after the Norman Conquest. From the existence of these very considerable remains of Remigius's church it is evident that the whole building was completed in a very few years from the date of its commencement, for the west front was, it may be presumed, the last instalment of the work to be taken in hand.

Now it must have been no small undertaking to have built a first-class three-towered Norman church between 300 and 400 feet long in something like 20 or 25 years, and it is no wonder that we have found in the present generation that the masonry of Remigius's church is not solid enough to carry safely vast loads which have been piled upon it by twelfth, thirteenth and fourteenth century builders, or to do

work which it was never meant to do by its original designer.

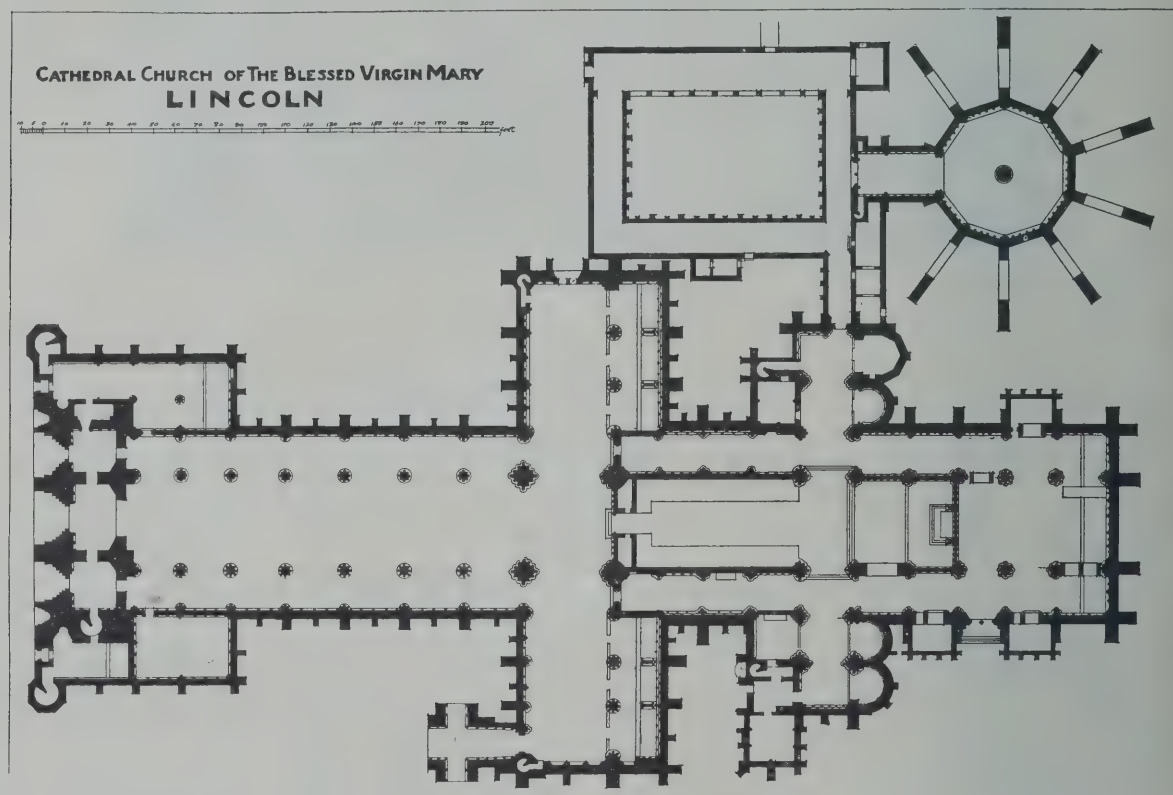
It is in this part of the cathedral that the present works of reinstatement were begun, and a few observations on the structure of the west front will therefore be of interest.

The original design of Remigius's towers and portals was very singular, the towers being flanked laterally and on the west side with short transeptal excrescences. These did not form an internal western transept like those of Ely and Peterborough, but were purely external features acting as buttresses to the towers. On the west side these quasi transepts were treated as deeply recessed porches of very considerable height. The northern one was not hollowed out into a porch but consisted of a series of chambers one above the other, these being a dungeon with what was probably a cesspit underneath it and a large loft above : the transept abutting on the south

tower contains a portion of a very roomy, winding staircase and there are chambers above the use of which is not quite clear. There appears, however, to have been some sort of a porch on this side. Remigius's west front remains fairly complete up to a height of 90 feet from the pavement. The north-west and south-west angles formed between the lateral and western transepts were filled in with masonry formed into semi-circular niches and there is a band of archaic sculpture round the piers on the

the thirteenth century, but the walls themselves are not of abnormal thickness and in parts are pierced with passages.

Reverting to the history of the building, the first alterations of Remigius's work were made by Bishop Alexander in the later Norman period. The three rich Romanesque west doorways were inserted at this time and the greater part of the nave was apparently reconstructed. The two west towers were carried up about 40 feet above the point at which



west side. Remigius's work is of the usual Norman construction, two thin skins of wide-jointed masonry filled up with poor lime concrete. And although there is a good bulk of masonry of this description on the outer sides of both the towers, the eastern walls and those facing the westernmost bay of the nave are of no great substance. In the recent grouting and reinforcing operations it has been necessary at times to drill boreholes into masonry some 20 feet thick. This has been the case with the abutments formed by the quasi transepts and those added in

Remigius left them and this work was designed in a comparatively light manner, the walls being double and pierced with three tiers of passages. This looks as if Bishop Alexander was not entirely satisfied with the solidity of Remigius's work. Alexander or his master mason must, however, have had considerable courage, as the nave of their cathedral was certainly designed to be vaulted in stone, the marks of its high vaults being still apparent on the inner faces of the towers towards the western bay of the nave. Authorities differ as to the date of the



high vaults at Durham, but these of Bishop Alexander at Lincoln may certainly be regarded as pioneer work, at any rate in England.

With the exception of the Norman portions of the west end the whole cathedral has been rebuilt in the thirteenth and following centuries. St. Hugh began this rebuilding with the quire, the eastern transepts, an apse with procession path and chapels, and part of the great transepts. His successors completed the great transept, rebuilt Bishop Alexander's nave and finally replaced St. Hugh's apse

roofed quire in a church, the nave of which had already been vaulted in stone by Bishop Alexander, I am bound to say that the more closely I examine the work attributed to St. Hugh the more I am inclined to accept Mr. Francis Bond's theories. That the aisle walls were thickened after their construction is, I think, practically certain, and the theory that the original scheme of the triforium and clerestory resembled that of St. John's, Chester, seems to me to be supported by very strong architectural evidence. Again, a close examination of the vault springers



WEST FRONT

with the square-ended extension known as the angel quire. I do not propose to try and describe these works at all fully as they are so well known already, but I may offer some observations upon certain details. First, with regard to St. Hugh's work, it will be remembered that a startling theory was propounded some 15 years ago by the late Francis Bond to the effect that St. Hugh's quire was not intended to be vaulted and that its interior design had been remodelled in order to adapt it to carry a stone vault. In spite of the inherent improbability of a bishop like St. Hugh being content with a wooden-

which has recently been possible reveals a great deal of roughly-executed masonry and irregular stone jointing which indicate that the high vaults have been contrived as best might be where no proper provision had originally been made for them.

A very remarkable feature of the thirteenth century work is the Rose window of the north transept, which is of almost incredible lightness and beauty of masonry. The plate tracery of this window is only 7 inches thick, and the work is in marvellous preservation.

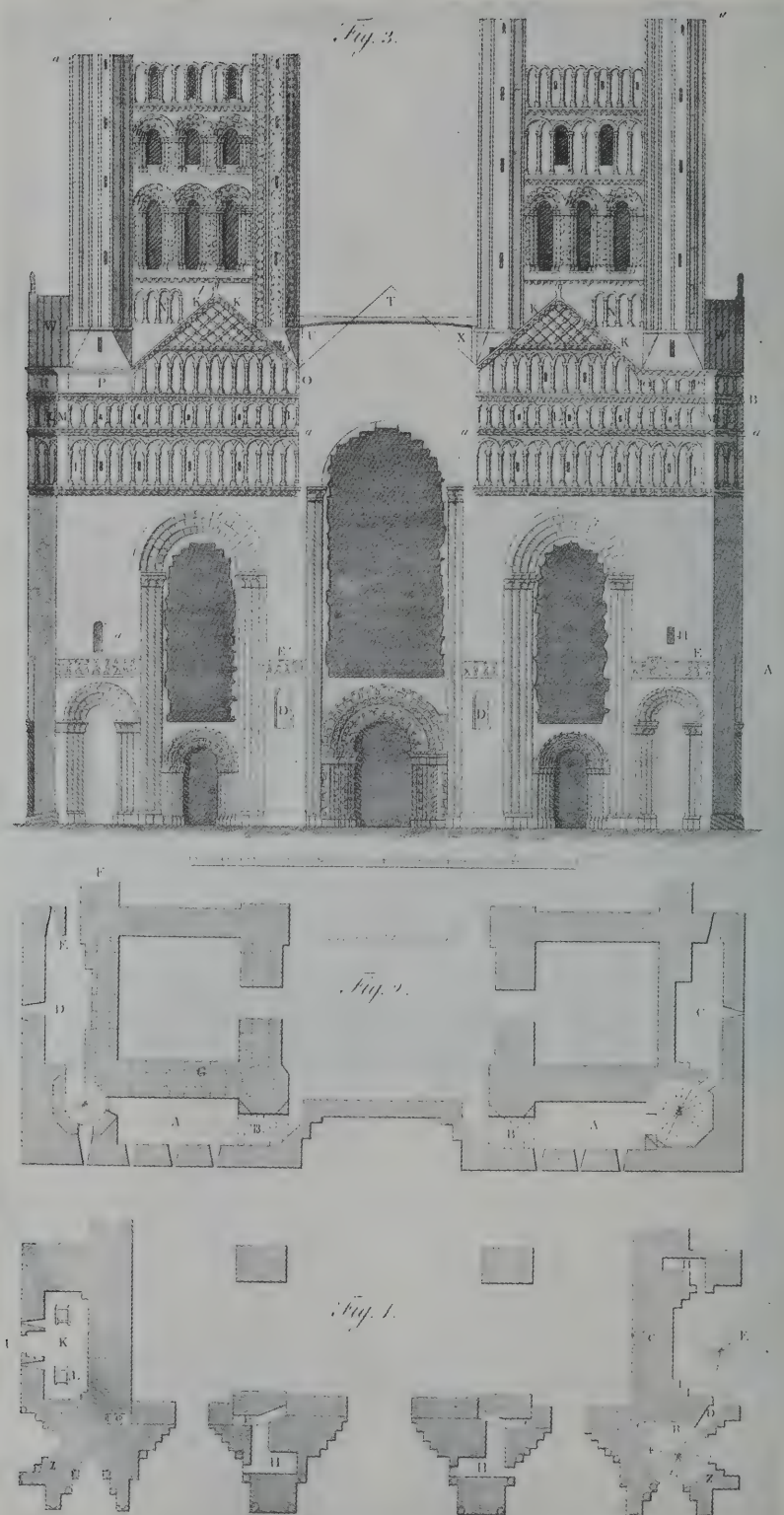


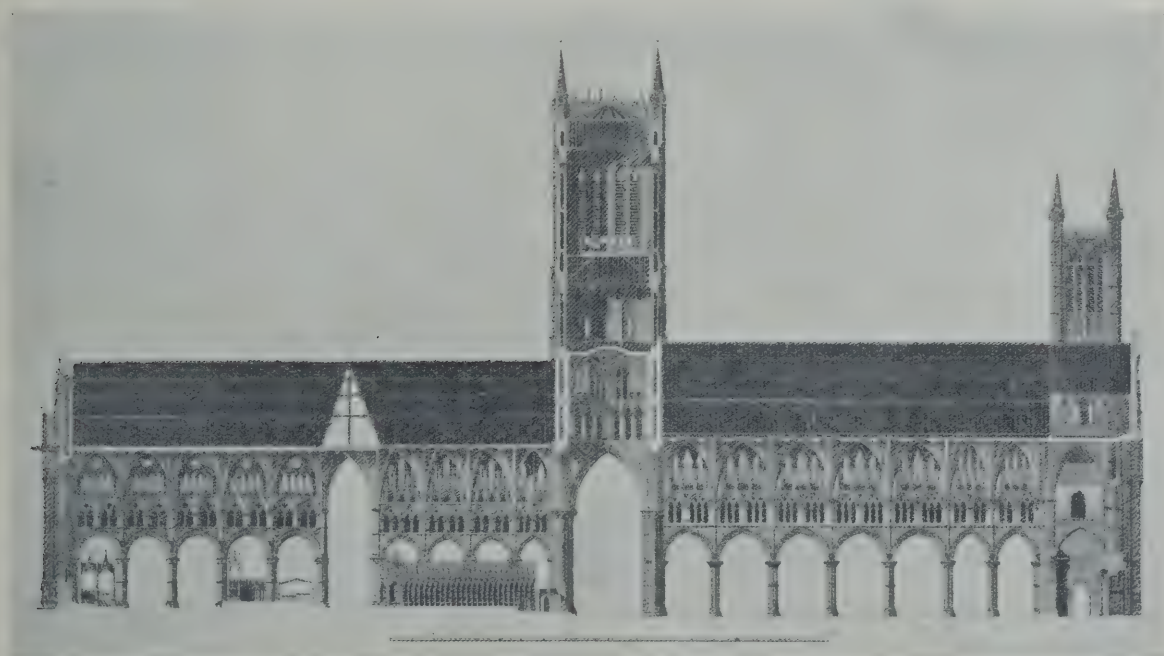
FIG. 3.—ELEVATION OF THE WEST FRONT OF ST. REMIGIUS'S CHURCH  
 FIGS. 1 AND 2.—PLANS AT VARIOUS LEVELS



The construction of the winding staircases in the eastern part of the church is very fine, the undersides of the steps being arched and parts of the staircases vaulted—one of these staircases leads to a little vaulted recess with a fragment of the old oak centering still adhering to the rubblework of the vault cell.

Then there are a charming thirteenth century lavatory in the south-east transept, a good crypt under the sacristy, and a most interesting chamber opening into the north-east transept lined with thir-

The work of remodelling the cathedral was carried on under Bishop Hugh of Wells, by the rebuilding of the nave. Here the details are less romantic than those of the quire and transepts but the construction is more substantial and practical. There is no evidence of experiment or of changes of mind on the part of the builders of the nave. The structure, moreover, is very well designed as a piece of engineering, the columns are small and compact, and the arches of very wide span. The work has stood very well on the



LONGITUDINAL SECTION

teenth century cupboards. And it would take a long time to repeat the barest catalogue of the treasures of sculpture and woodwork and ironwork and glass in the eastern parts of Lincoln cathedral. I will merely mention one fact (or theory) which I do not think has been much noticed hitherto: it is that in the lancet windows of the great south transept there is thirteenth century glass of two different styles, and it seems reasonable to suppose that the more archaic panels in these windows were brought there from some of the chapels of St. Hugh's apse when this was destroyed to make way for the "Angel quire."

whole, the only serious defects being a slight tendency for the clerestory walls to buckle outwards.

It will be noticed that the two western bays are narrower than the others and that there is no flying buttress to the western pier of the nave, this being accounted for by the presence of a chapel on each side like those in St. Paul's Cathedral. The northern chapel is groined from a very lofty slender central pillar of marble; the corresponding southern chapel has a square domical vault. These chapels are prolonged westward outside the line of the western towers,

and when they were built considerable masses of masonry were added at the eastern angles of these towers. It almost looks as if anxiety was felt about these towers as early as the middle of the thirteenth century. And we read of earthquakes and other dreadful occurrences which may have caused disruption at this end of the cathedral—and we can see for ourselves strangely distorted arches, the remains of Bishop Alexander's work, on the sides of the towers flanking the nave. No sooner was the nave finished, perhaps before, the central tower collapsed in the second year of Bishop Grosseteste's episcopate. But Grosseteste was not a man to be easily discouraged and the tower was soon rebuilt, a light lantern with double walls and two stages of galleries carried on broad arches and on splendid clustered piers of marble which are still very sound and good, though the great arches have cracked a good deal owing to the later additions which were built above Grosseteste's lantern. The refacing of the west front was probably done when the nave was building, and was not, in my opinion, done for any structural reason, but simply with a view to decorative effect and to provide room for statuary like the fronts of Salisbury and Wells. The thirteenth century niches and arcades stand in the same plane as the Norman arches of Remigius's west front, and therefore cannot very well have been added in order to provide an abutment to the west towers as has been supposed. Recent investigations show that this thirteenth century facing is not bonded into the earlier masonry, and therefore its addition has weakened the towers rather than strengthened them.

To revert to the central tower it has been possible to examine the interior of the lantern in detail during the progress of the present works and to ascertain how the lantern has been strengthened in order to enable it to carry the vast belfry which was added in the fourteenth century about the time the "angel quire" was building.

The original lantern had four lancets on each face, grouped in pairs, and was two storeys high above the arches. The shafts were of marble and the ceiling was certainly of wood. In the fourteenth century the belfry stage was added, a proceeding which must have doubled the weight of the tower, and the lantern stage was vaulted in red brick with stone ribs. This vault has,

of course, springers at each corner of the lantern, and in addition there are intermediate springers above the points of the large tower arches. To provide abutment for these intermediate springers an ingenious device was made use of. Each of the thirteenth century lancets was divided in two with a stone fourteenth century column; and from these fourteenth century columns, which were bonded into the outer walls, arches were turned in the thickness of the passage-way round the lantern. These arches carry the abutments of the intermediate springers of the vault. The arrangement distributes the extra load in a very scientific manner and avoids increasing the stresses on the slender thirteenth century arcades and shafts as far as is possible; though, of course, the risk of building so vast a belfry on so slight a substructure must have been very great.

The belfry of the central tower is built as lightly as possible and, on the whole, it has stood very well, although there are some bad cracks on the north and east sides and most of the bond stones provided to tie the two thicknesses of wall together have been broken through.

Extensive works of strengthening are in hand in the central tower, and the four great arches and the adjoining walls of the transepts have been consolidated, as has the masonry of the thirteenth century lantern.

Passing over other important building work done during the fourteenth century, such as the completion of the "angel quire," the building of the cloisters, and the rebuilding of the south transept front, we find that the cathedral authorities must have become dissatisfied with the appearance of the west front; this will be easily understood if we visualise the present front without the top 70 ft. of its towers. Remigius's front, with its projecting transepts, must have been bold and striking, but when these projections had been masked by the screenwork added in the thirteenth century, the whole thing must have looked comparatively flat and uninteresting, and the tops of the two stumpy Norman towers peeping over the thirteenth century screen wall must have made the effect worse than it would have been without any towers at all. So it was decided to raise the towers 70 ft. and to add spires to match the spire which then existed on top of the present central tower.

Considering the risks that had already been



taken in building the central belfry and its spire on the top of a thin shell of masonry like Grosseteste's lantern, it is not to be wondered at that the raising of the western towers was undertaken quite cheerfully, since the Norman substructures, though they had evidently settled a good deal, and though they must have even then shown signs of weakness, were certainly bulky, and may have been assumed at the end of the fourteenth century to have been sound.

tower to a less extent to the north. So above the vault of the nave a very flat arch was built, comparatively roughly, in order to act as a tell-tale and to give warning if the divergence of the towers should increase during the process of adding the belfries.

Although the recent strengthening of the north tower and the proposed consolidation of the south tower have become unquestionably necessary for the preservation of this part of the cathedral, it



THE NAVE, LOOKING EAST

Probably it was argued that the cracks and settlements (for the towers both must have leaned outwards before the present belfries were added) had occurred shortly after the completion of the older work, or were perhaps the result of the traditional earthquake and that the old towers had finally taken their bearing, and that therefore it was quite safe to carry them up.

Still, somebody seems to have had doubts about this, and the chief cause for hesitation must have been the fact that the south tower leant very considerably to the south and the north

should be remembered that the west towers remained standing for 500 years after they had been raised to their present height; the tell-tale arch, though somewhat distorted and showing signs of movement having occurred since it was built, has not fallen, and although various attempts to strengthen the substructure have been made during the last 200 years it has never been possible until now to get at the real source of the trouble owing to the lack of means. The fact that in spite of all this the towers have stood as they have done makes us marvel at the skill of the fourteenth cen-

tury builders while we are staggered at their boldness.

The belfry stages of the western towers have two large two-light openings on each face; Bishop Alexander's work on which they stand has three openings on each face, so the heavy piers between the belfry windows stand on the crowns of Bishop Alexander's arches. The masonry of the belfries is naturally much better than that of the Norman work below and is well bonded with not very much rubble filling, though the work is not built throughout with block stone. The external surface is much weathered and a great deal of this has, unfortunately, to be renewed in the north tower. The exterior of the south tower was reinstated about 40 years ago. This reinstatement, though regrettable, is inevitable. It is a question of disintegration and the consequent risk of accidents due to falling pieces of stone and is quite a different matter from that of the stability of the towers.

At or about the same time as that of the completion of the belfries the ground stages of the towers were remodelled internally, the Norman arches leading into the nave were built up and those leading eastwards into the aisles were remodelled. The walls were veneered with perpendicular tracery, the present west windows were inserted, and the tower spaces ceiled with exceedingly flat lierne vaults. A close examination of the vault in the north tower, which is now centred preparatory to its repair, shows that there has been a change of design here, the springers being prepared for a much steeper vault and the whole work being clumsily put together as if the stones had all been prepared for fixing before the change of design was decided upon.

As has already been observed, all the three towers of the cathedral once had tall leaded spires. The central one is said to have fallen on the day when the use of the English Prayer Book was first adopted at Lincoln, but the western spires were preserved until the end of the eighteenth century, when they were taken down as being dangerous, a proceeding which gave rise to much resentment. At this time James Essex was architect to the Dean and Chapter and was busy with repair works to all three towers. But before his time the condition of the western towers must have caused alarm, for the Norman arches on the ground floor were built up with solid masonry pierced only with comparatively small doorways. This is said to have been

done by Gibbs, who may have become connected with the cathedral during the building of the library which is attributed to Sir Christopher Wren.

In or about the year 1800 Essex added two buttresses on the inner eastern angles of the western towers, the only angles not then buttressed in some fashion or other, and he connected these new buttresses with an arch crossing the nave at the level of the triforium.

Essex was an architect of ability and taste and appreciated Gothic architecture better than most of his contemporaries. Here at Lincoln he added the parapet of the central tower, a most admirable piece of design though unfortunately built in too fragile a manner considering its exposed position. Essex is also responsible for the reredos of the high altar, a piece of work which no one would dream of reproducing, but which nevertheless has so much artistic merit and is of so great historical interest as an early monument of church revival that it merits careful preservation, notwithstanding the fact that fashions change in these matters.

Essex, I believe, also designed the bishop's throne, which fits in admirably with the fourteenth century stalls. And he built an apsidal chapel off the north-east transept on the site of an older rectangular chapel in a manner which it is difficult to distinguish from the style of the adjacent chapels of St. Hugh's period.

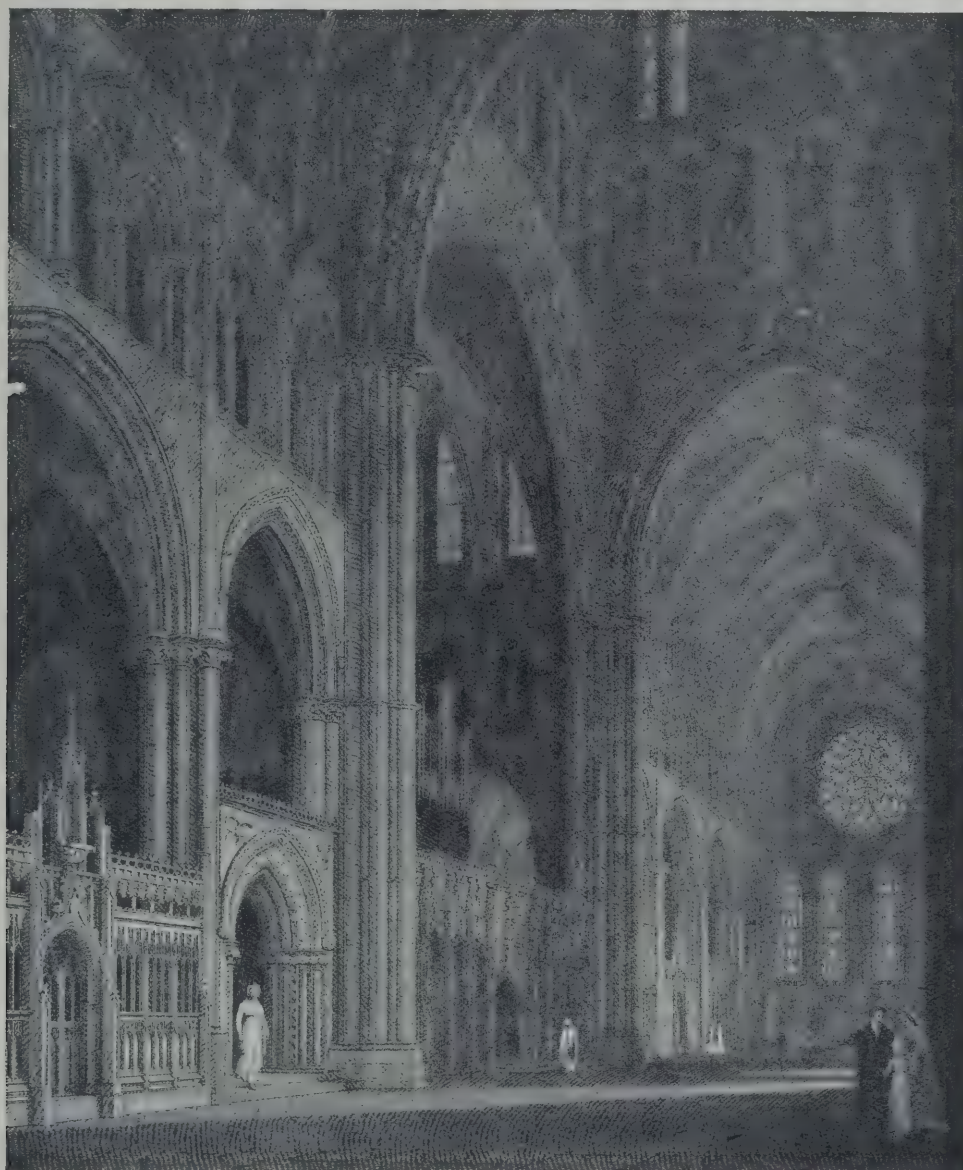
Repairs were going on under Essex in the central tower also. A large crack over one of the great arches had a bond stone let in with the date cut on it, probably intended to act as a tell-tale. The existence of this had been forgotten, but it was rediscovered during the present works. The movement since Essex's time had not been very great in this part of the fabric.

Buckler was one of the architects in charge of the cathedral during the nineteenth century. He was one of the older school of Gothic revivalists and did excellent work in his time, especially in and near Oxford; Lincoln cathedral was fortunate in being under the care of so modest an artist at a period when Deans and Chapters and eminent architects were egging each other on to destroy Rood-lofts and erect Venetian mosaic reredoses. During the middle of the nineteenth century not very much was done to the cathedral beyond the ordinary repair of stonework and lead and the building of a very excellent timber roof over the south transept. Buckler did some restoration of the Nor-



man west doors and he or his predecessor was also responsible for inserting iron ties across the west towers and adding external iron bands—the best

of Dean Gregory at St. Paul's, an extensive scheme of restoration was set on foot under the late J. L. Pearson.



THE TRANSEPT  
Showing the Lantern in Central Tower and "Bishops Eye"

thing that could be done at the time short of a complete reconstruction.

About forty years ago, during the deanery of Dr. Butler, a distinguished churchman of the school

The angel quire, the north transept, and the chapter house and cloisters were all more or less thoroughly restored under this scheme, and although some of the details may be open to

criticism, the ultimate result has been undoubtedly beneficial. The renewal of chipped and broken mouldings and ashlar may have been too drastic, and the use of Weldon stone in replacing these was certainly a mistake, not that the Weldon stone itself has decayed, but that, owing to the porous nature of the new stones, the old stones immediately underneath them have suffered most seriously in many parts of the work.

About the same time as the restoration of the east end, Mr. Pearson took the west front and towers in hand. He found both towers in bad condition, but considered the south tower to be the worst of the two, certainly it was the most out of the upright. This tower he set to work to restore and to make suitable for the cathedral bells. He built up several of the open arcadings with sound ashlar, put in what bonders he could, thoroughly restored the external masonry, and designed a tall timber bell cage like those described by Viollet le Duc to minimise the effect of the bells on the tower walls. (This timber belfry was afterwards superseded by a steel frame when the bells were rehung by Taylor of Loughbrough.) In short, he did the work as thoroughly and well as it could be done forty years ago; but he could not tackle the inherent weakness of the Norman sub-structure, a thin ashlar facing filled with concrete which had lost its cohesion, since he had no appliances wherewith to remedy such a state of things. There is a story among the cathedral workmen that when the shores were removed after Pearson's restoration, a loud crack was heard and the western screen wall moved an inch or more forward and then came to rest, a hair-raising experience for those present on the occasion.

Nothing was then done to the north tower beyond building up an opening or two with ashlar, but in 1896 some fresh iron ties were put in.

After the death of Mr. Pearson the late Mr. Hodgson Fowler became architect to the Dean and Chapter, and between the death of Dean Butler and the appointment of the present Dean, Dr. Fry, very little was done to the cathedral beyond current repairs, though a new library was built and electric light was installed in the church. Mr. Hodgson Fowler died shortly after the appointment of Dr. Fry as Dean, and my personal connection with the cathedral dates from that time.

Some repairs were then in progress to the great eastern arch of the crossing, but it was evident

that the condition of the north-west tower was critical, though we had to wait a good many years before it was possible to take it in hand.

Sir Francis Fox will tell you about the repair methods which have been adopted. Grouting the Norman walls under pressure was, of course, an obvious method of procedure; but I believe I am right in saying that Lincoln is the first instance of the systematic employment of metal reinforcement in combination with grouting, and also that the use of mechanical drilling and the adoption of pneumatic jackhammers for this purpose were novelties at the time they were introduced at Lincoln.

The reason for employing metal reinforcement is fairly obvious. When a rubble-filled wall fails owing to crushing, it is bound to burst. Reinforcement tends to prevent such a wall from bursting, therefore it tends to prevent it from crushing.

As Sir Francis Fox will tell you, the north-west tower has been strengthened not only by grouting the existing masonry, but by adding reinforced concrete girders in the various passage floors, and in some places vertical concrete posts, all carefully connected up to the reinforced hearting of the walls.

As regards the reinforcement, delta metal was chosen, as more reliable than steel, from the point of view of the risk of corrosion. But delta metal is of a rather greasy nature, and not likely to adhere to the concrete as steel will do, so at Lincoln the delta bars are in all cases twisted and hooked.

As for the necessity of mechanical drilling, it need only be remarked that without this it would have been impossible to have reached the heart of the walls without bringing the whole super-structure down in an avalanche.

The work that has been begun at Lincoln has only been made possible by a fortunate combination of circumstances. The first of these is the unselfish and marvellous energy of the Dean and his success in enlisting the support of the county of Lincolnshire and of friends and kinsmen in America and elsewhere.

But the provision of funds is not all that can be done, and I pay my tribute here to the moral support the Dean and Chapter have given throughout a difficult time to those actually engaged upon the work. Next we have had the ungrudging assist-



ance of Sir Francis Fox, with his unrivalled experience in structural work of all kinds, the experience of a long lifetime, combined with an almost youthful readiness to adapt old methods to new problems, and with physical activity equal to his freshness of outlook. Then again, it seems almost providential that at this particular time the resident supervisor of the works, my good friend Mr. Robert Godfrey, should happen to have had a natural talent in mechanical engineering and practical workshop experience to boot. I venture to say that without the exceptional experience of such matters which Mr. Godfrey possesses, the present works would have cost double what they have done. Upon Mr. Godfrey's devotion

to the interests of the cathedral and upon his personal courage in performing his duties in times of ill-health, I will not presume to enlarge. But I can testify here to the efficiency and good will of all the cathedral workmen as well as to the other personal factors which have made this important undertaking possible.

Sir Francis Fox will now give an account of the work from the point of view of one who has had intimate experience of constructional work of such variety and magnitude that the repair of a cathedral tower might well seem a small affair to him, but who has nevertheless given his best of thought and of personal exertion in the interests of Lincoln Cathedral.

## Part II—The Injuries and Accidents, and Methods of Repairs

BY SIR FRANCIS FOX, MEMBER OF THE INSTITUTION OF CIVIL ENGINEERS [*Hon. Associate*]

WITH PHOTOGRAPHS BY MR. S. SMITH, STEEP HILL, LINCOLN

IT was in July, 1921, that I was invited by the Very Rev. the Dean of Lincoln, Dr. Fry, to visit his cathedral, and he said that Sir Charles A. Nicholson, the diocesan architect, would be glad if I would co-operate with him in the serious endeavour to save that splendid and ancient fabric.

I need not say the great pleasure it afforded me to do so; and the willingness and kindness evinced by Sir Charles were most encouraging.

The first step to be taken was to look up all the history of the cathedral, in order that we might be guided aright as to the very serious injuries to the central tower and the two western towers.

I did not think we were likely to find the building had subsided as at Winchester, for the fabric stands on the summit of the high ridge, and was not likely to be affected by water in the foundations—practically all the plinths are level; but we felt that with the precarious conditions which existed in these two towers, it was inadvisable to make any examination of the foundations until a later date. This, however, has since been done, and it was found that the cathedral is standing upon a fine solid bed of oolitic rock.

At my first visit I was introduced to the Clerk of Works, Mr. Robert S. Godfrey, and I felt it was very important to both of us; but I was sure that the choice of both the Dean and Sir Charles Nicholson could not be anything but wise. It only required five minutes' interview with Mr. Godfrey to show that he was a man of great experience and ability in all directions—and now, after five years' co-operation, the choice has been more than justified.

It will be helpful to give here a list of the various

disasters which have occurred to the cathedral. The following are the major events, but doubtless many smaller ones have taken place during the lives of each succeeding generation.

In the year 1124 the cathedral was gravely injured by fire.

In 1185 it was razed to the ground by the great earthquake, with the exception of the two western towers and the East bay of the nave.

1244-5. The great central tower fell down.

In 1547 the timber spire of the central tower, which was 300 feet above the masonry structure, was blown down during a severe gale.

When the great earthquake took place, recorded by the historian Roger de Hovedon, in 1185, the entire Norman cathedral was brought to the ground with the exception of the two western towers, the height of which is 212 feet.

On the appointment, in 1186 A.D., of the new bishop from Witham Priory, Somerset, St. Hugh of the Grande Chartreuse, near Grenoble in Burgundy, he announced his intention of rebuilding the entire cathedral, but desired that the western towers should, if possible, be retained; and, with the intention of providing a buttress to hold them up, his successors, Hugh de Wells and Grosseteste, reconstructed the fine western front, which is approximately 200 feet in width by 100 feet in height.

Much to our surprise, this masonry front was found, on investigation, not to be properly bonded in with the towers; and there were serious cracks existing for the whole distance of 200 feet, and for the height of 100 feet. The result was that the entire front was

showing signs of falling in a westerly direction on to the green sward of grass—like the cover of a book.

Notwithstanding all precaution, the towers continued to settle, and the cracks which were in the old work, to grow larger and spread in different directions.

These fissures in the masonry seemed formidable enough to justify the anxiety of the Chapter of a later period; but even 200 years ago they were so much increased that the towers themselves were thought to be in danger of falling. As a preventative, the heavy structure, or the building up of the two main arches under each of these two towers was advised and carried out under the direction of Mr. Gibbs, the consulting architect of that period, *viz.*, 1726.

Mr. Gibbs also advised the taking down of the lead-covered spires of the two towers; but, as the citizens were antagonistic to such an extent that it culminated in a riot, it was decided to leave them until a more convenient time. The demolition of the spires took place in 1808, as far as one can trace, without any opposition.

Even with this lessened weight, the movement still carried on; for in 1820 heavy iron cramps were applied, by the advice of an eminent architect, to prevent further mischief by the spread of the fissures in the towers. These bars are an inch thick and four inches broad, the inside ones being carried through the wall at both ends, and through a corresponding bar outside, and screwed to it by a powerful nut. Five of these hoops, both inside and outside, are attached at proper distances, between the roof of the church and the top of the towers. According to records, about six tons of iron are thus used on each of the west towers.

We intend to take off these iron bands as the repair work proceeds. Two of those at the highest point have already been removed, and on one, the smith's name and the date is deeply stamped or cut in. The date coincides with that just given, 1820. Several of these iron bands are broken in two; in some cases there is a distance of two inches between the broken ends, which clearly shows spreading of masonry. In other cases, the bolt that carries through the wall has broken immediately behind the nut; some of the nuts have fallen to the roof below; others that are so rusted in, have stayed in their position, thus giving a false impression of security. In addition to these iron bands, some hundreds of iron wedges have been used to level up the courses of the masonry that had dropped, owing to the spreading of the tower walls. The destruction produced by wrought iron to masonry is almost incalculable, as it is laminated, and when the corrosion takes place these laminations gradually open, and by this slow expansion the whole mass of masonry is either lifted or broken off. In some cases, hundreds of tons of masonry are being lifted or forced

from their original position. There are cracks to-day from 1 inch to 6 inches wide, running practically the full width from the south-west corner of the west front to the south-west angle of the north-west tower. These cracks, prior to the present repairs, carried right across the north-west tower to the extreme north end of the west front. One crack at 90 feet up was 12 inches wide. This is now made good.

In 1896, the cracks in the walls of the north-west tower continued to open and spread in different directions, and it was urgently necessary that something should be done, and done quickly, to prevent the collapse of the tower. The authorities at that time adopted the method of fixing strong iron bars through the walls at various levels, and on the most vital parts running from east to west and north to south. This was a serious undertaking, as to cut holes through the masonry, in some cases 14 and 16 feet thick, which is badly dislocated, and without slip, was no mean achievement. Our present master mason, Mr. H. J. Davis, was on this work, and time after time when they had nearly cut through the walls, the loose rubble in the interior would fall, and they had to begin all over again.

There is no doubt the iron bars steadied the movement for a time; but, as the whole of the masonry was so completely dislocated, the movement continued to the last.

In 1921 the arches in the bellchamber opened to such an extent that the archstones had to be strutted to prevent their falling out. Also the ribs of the vaulting of the north-west vestibule had dropped, so that instead of their being concave they were convex and at the point of falling to the ground.

The south-west tower is still urgently requiring attention, as the tell-tales, which are constantly being replaced, break within a few weeks after their fixing, which is a sure sign of continued movement.

The authorities have from time to time been engaged on the strengthening of the central tower and transepts.

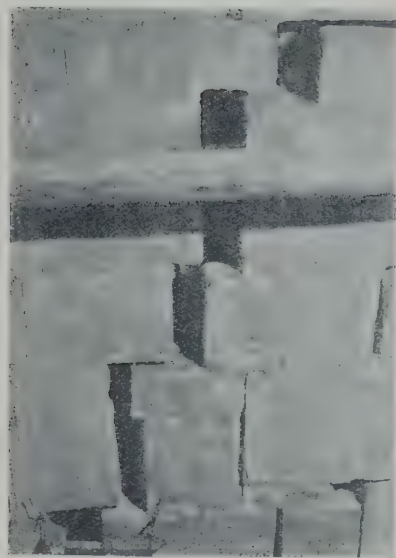
Behind the arcading in the lantern very strong relieving arches have been built in on each side, and additional columns inserted. This was so skilfully carried out that, unless one is familiar with it, it seems to be the original design.

The central tower, the crowning glory of the cathedral, is most wonderfully light in construction. Unfortunately, it has proved to be too light to be of sufficient strength to withstand the ravages of time. The tower has what might be termed a double wall, with passages running round each of the four sides. At certain heights these two walls are coupled together with strong bonding stones, and for a few feet upwards the walls are united with masonry; then again





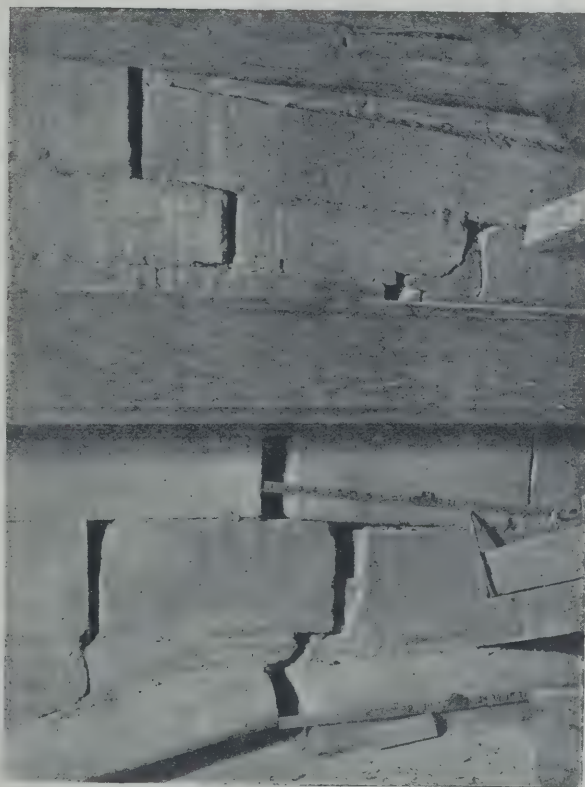
(1) North Wall of Central Tower from above the North-west Transept Vaulting. North-west Spandril



(2) North Wall of Central Tower from immediately above the North-west Transept Vaulting. North-west Spandril 80 feet up



(3) North Wall of Central Tower from immediately above the North-west Transept Vaulting. Position to the North-East Angle 80 feet up. Fissure 6 inches wide



(4) Arch Broken immediately above the Lantern of Central Tower

come the two independent walls, and so on to the top of the tower.

Owing to the continued spreading of the cracks in the walls, to-day there is not to be found a single bonding stone intact. Each one—and they are many in number—shows fractures from  $\frac{1}{8}$  in. to 2 in. wide.

The tower walls are split in almost every possible direction, vertical, horizontal and longitudinal with the wall faces.

In 1924 the two sub-arches, which are seen immediately above the vaulting of the lantern, had collapsed to such an extent, owing to the four main lower arches spreading, that the weight of the masonry above was actually bearing on the vaulting of the lantern, and as this is only a very light construction, intended merely to carry its own weight, it was showing serious fractures.

All of this dislocation has now been made good and completed to the clock chamber floor, 125 feet above ground level.

It is quite possible that the disintegration in the central tower was caused in the first place by the fall of the spire, A.D. 1547, as described later. This also severely racked the north and south transepts, causing the walls to buckle outwards, which in turn has allowed the vaulting to flatten slightly, splitting and flaking the stones of the arch ribs.

Doubtless during each century and each generation efforts were made to effect necessary repairs, but these were limited to the face stones, both inside and outside the towers; and, although the work was certainly good, the masonry within the walls could not be reached by the then known methods.

The first matter of interest which we encountered in the north-west tower was the dungeon, which in early and mediæval days was used for the confinement of prisoners who were to be executed under powers held by the ecclesiastical authorities. This chamber, which is on a level with the floor of the cathedral, is 20 feet in length, 6 feet in width, and has a height of 20 feet. It had no door nor window, not even a ventilator. The unhappy prisoner was lowered by a rope through a trapdoor in the stone arch above and taken out in the same manner to his death.

We have been able to repair the cracks and defective masonry, thus preserving the dungeon for the inspection and interest of all future generations.

About 45 feet above the nave floor we found what evidently was a doorway built up with masonry which, on being examined and removed, disclosed a circular stone staircase communicating with the ground level, with the original stone newel in position. No record of the existence of this staircase has been found, but it was filled with debris from the earthquake for its entire height. This has been grouted into a solid mass,

and serves as a most effective buttress in what was otherwise a weak place.

Another unpleasant discovery made during the work on the north-west tower was the damage done by the "death-tick" beetle, or *Xestobium tessellatum*, the great enemy of most ancient timber roofs, which has since been discovered in many parts of the cathedral, and to which the late Professor Lefroy devoted so much attention. The floors have been reconstructed in ferro-concrete, which no beetle yet discovered can touch.

It will be remembered that I read a paper before the Royal Institute of British Architects on 17 February 1908, on the system of grouting by pressure invented by the late Mr. James Greathead, which I applied throughout the repairs of Winchester Cathedral with a result so absolutely successful, not only there but in scores of other buildings, that I strongly advised the Dean of Lincoln to allow the method to be adopted at his cathedral. As a preliminary step, it would be necessary to obtain the approval of Sir Charles Nicholson and of Mr. Godfrey, to both of whom the treatment was novel. Sir Charles stated, in a letter of 6 December 1921 to me, in the kindest and most generous language, "I was grateful to make use of your experience, which I should say is unique in matters such as that we have in hand."

Mr. Godfrey's wide knowledge of mechanical engineering enabled him to lay out a perfect air-compressing plant for machines in any part of the cathedral, and for delivering water, also by compressed air, to any height of the building which is above the limit of the city water company. He also introduced the jack hammers and chisels, and the employment of delta metal as tie rods, thus avoiding the objectionable results of using iron and steel which one sees throughout Lincoln and St. Paul's Cathedrals. The nuisance of covering the whole fabric with dust is also prevented.

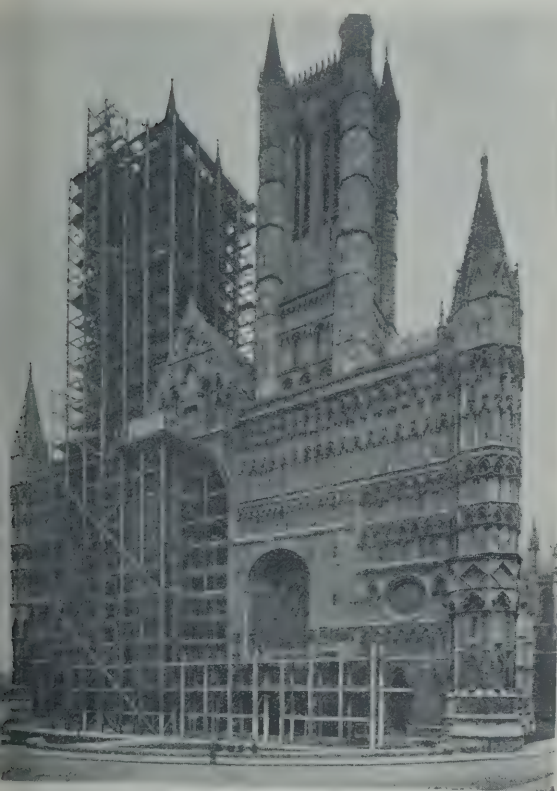
As a result of all these improvements, which, based on the grouting system, have been in course of execution to the present time, we hope that by 1927 all the major repairs will have been completed, unless we find still further trouble as we proceed.

The second great cause of damage was the collapse in the year A.D. 1547, of the high timber steeple or spire which had been erected on the central tower, and attained a total height of 500 feet above the floor of the nave. Providentially it fell, more or less vertically upon itself, and did not cause much damage to the roofs of nave, choir, and transepts, but it explains the great cracks which we found in the four walls of the tower and in the masonry floor of the bell chamber, which will be further described with the aid of photographs later on.

We now return to the repairs on the north-west



wer. This is approaching completion, thanks in great measure to the fine timber scaffold, 212 ft. in height, 35 ft. wide and 36 ft. in length, which is constructed of 9-in. by 3-in. planks, all standardised, before leaving the ground—each upright requiring three planks in the bottom portion 7 in. by 2 in. and two in the upper. It is the finest example of such a scaffolding in existence and is a monument to the skill of those who designed and constructed it. In no place is



FURTHER ADDITION TO WEST FRONT SCAFFOLDING  
JUNE 1925

more than  $\frac{1}{16}$  of an inch out of truth. By the help of the scaffold the external masonry of the tower has been examined. It was found to be so weathered and rotten that almost the whole 9 ft. of the top of it has been refaced. It also enables the men to pay attention to any cement grout escaping on the outside of the walls, and immediately to apply wet clay on any leak thus avoid staining the masonry face. Within a comparatively early date, this scaffold will be taken down and re-erected on the four sides of the north-west tower—for although this was repaired 40 years ago, nothing but masonry facework could be dealt with, the interior rubble being cracked and loose, but

we hope and think that these repairs will not prove nearly so serious as in the case of the north-west tower.

*Sounding the Walls.*—This is effected by gentle tapping with a one-pound hammer—throughout the entire fabric—and, wherever it indicates cavities, the necessary application of the nozzle and the forcing in of cement under pressure (delta metal ties having been previously placed in position) immediately render the walls sound and solid.

In many places the masonry blocks were neither bonded nor tied in, and wherever visible cracks exist they are carefully investigated, for although perhaps only an inch in width is externally visible, they may prove to be anything up to 10 or 12 inches in the interior.

Owing to the transept walls buckling, the vaulting had flattened to such an extent as to show cavities from 4 to 5 inches in width between the vaulting and the main walls, up and down each cell to the full length of the transept. These cavities were not previously located, as a great many others were, owing to their being full of accumulated dust and debris.

Thanks to the unceasing energy and courage of our good Dean, who made one journey to Canada and two to the United States—the cost of the repairs of the central tower and adjacent transepts has been most largely undertaken by our transatlantic cousins—in memory of their ancestors who sailed in the “Mayflower” in A.D. 1621 from Boston in Lincolnshire and founded Boston in Massachusetts—afterwards spreading over the entire continent.

The weight of the vaulting in each of the two transepts is over 300 tons; and the approximate weight of the central tower is 13,237 tons. The total area of the four main piers at the base on floor level is 361 square ft. Assuming these bases are carrying the total superimposed weight, it works out at  $36\frac{2}{3}$  tons per square foot.

The approximate weight of the north-west tower is 8,500 tons, equal to 19 tons per square foot on the foundations.

We will now consider the facts which necessitated the present repairs. In July 1921, Mr. Godfrey was carefully examining the north-west tower, and found considerable movement had taken place since the previous examination. Immediately tell-tales were fixed over every crack that could be reached with ladders. After this was completed, which extended over several months, they were all examined and checked, and those broken replaced. These were eventually again examined, and finally we found out where the greatest movement was taking place. This was at some 90 ft. above ground level. The tell-tales fixed at this height one day were found to be broken in two the next. On one occasion, October 29th, after a gale of wind, we found tell-tales had opened  $\frac{1}{16}$  of an inch, of which a report

was immediately sent in to the Dean and Chapter. After a thorough examination they and we came to the conclusion that it was only by grouting under pressure that the cathedral could be saved.

Steps were at once taken to get the necessary plant to commence operations.

The grouting machine was, as already stated, invented by Mr. James Greathead about 1888 for use in construction of deep tunnels and the electric tube railways of London, and has been used with great success for the securing of notable road and railway bridges, Winchester Cathedral, and many other historic buildings right down to the present time.

Owing to the extensive amount of grouting that

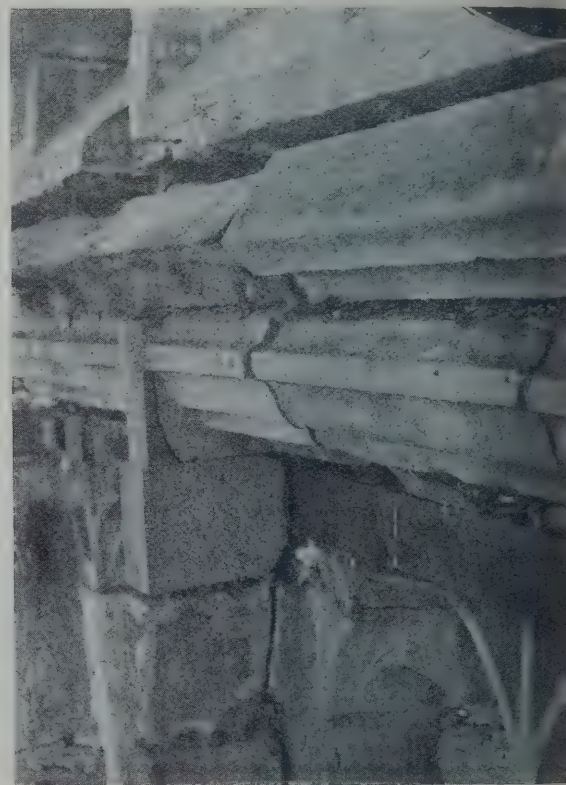


NORTH-WEST TOWER. NORTH WALL NEAR NORTH-WEST ANGLE  
SHOWING CORNICE AND SILL BELOW PARAPET—TIED  
TOGETHER WITH IRON BARS

would be required at Lincoln, and the thickness of the walls that we had to penetrate, in some cases 20 ft. thick, it was decided to purchase a motor driven air compressor. This was delivered and grouting commenced March 9th, 1922. We very soon found out that, owing to the looseness of the rubble core, some other method less costly and also less dangerous, other than the ordinary hammer and chisel must be applied to enable us to get the grout right into the hearting of the walls.

To this end jackhammers, driven by compressed air were purchased. These tools have proved to be most effective from every point of view. It is nothing unusual for two men to drill a hole in the walls to a depth of 12 ft. in one hour, in what would otherwise require the same number of men five to six days with the ordinary hammer and chisel method. This was not

the only point we had to consider. The condition of the masonry was almost at the point of collapse, and would not stand the heavy blows of the hammer; where, with the jackhammer, although it makes a terrific noise in working, it gives a percussion blow, with very little jar to the building. By these means we have drilled in the masonry of the north-west tower up to October 28th 1925, inclusive, 11,774 holes, approximately 1½ miles in length, and the number of holes in the cent



NORTH-WEST TOWER. NORTH WALL (CENTRE) SHOWING  
CORNICE BELOW PARAPET

tower and transept 10,623, approximately 3½ miles making a total of 9¼ miles.

An accurately written record is issued week by week, and, in many instances, drawings are made showing the exact position where every hole has been drilled, the line it takes, and where every gallon of grout has been forced in.

By this method of grouting we are able to repair the most ancient and beautiful buildings, without in the least degree defacing their antiquity. At the same time we practically rebuild them, making them many times stronger than they were when first erected, without much as moving a stone.



It may be of interest to know that the improved method of grouting, and the drilling of the walls by the jackhammers, which originated at Lincoln, have been adopted and are being carried out at Durham Castle, St. Paul's Cathedral and elsewhere.

The method has aroused a world-wide interest. Notable engineers and architects from all parts of the globe have inspected it, and have written expressing their full approval of what we are doing.



CRACK IN SOUTH FACE OF NORTH-WEST TOWER,  
45 FEET ABOVE FLOOR LEVEL

Before proceeding further, I would like to say a few words about grouting. As you know, there was a great deal of controversy for and against it while St. Paul's was appealing for funds in the early part of last year. There is bad as well as good grouting. Unless this method is carried out in a right and scientific manner, the state of the walls sooner or later will be worse than before. The proper order is first to blow out all dust and dirt that is in the loose core, then thoroughly to wash out with water under pressure, continuing to blow until it runs out of the surrounding places quite clean. While the core is still damp, and in a receptive condition, the cement grout must be blown

in also under pressure. This is varied according to requirements, 40 lb. to the square inch being the average employed.

If the core be not thoroughly cleaned, you simply fill the void; and the cement will not adhere, consequently you have added weight without adding strength to your building.

In addition to the grouting up of the cracks, we are reinforcing the masonry with delta bronze cramps.



NORTH SIDE OF NORTH-WEST TOWER 90 FEET UP, SHOWING  
REINFORCEMENT FOR CONCRETE BEAM. LOOKING EASTWARD

These vary from 9 in. to 14 ft. in length, and  $\frac{1}{4}$  to 1 in. square, and have a tensile breaking strength of 30 tons per square inch. Up to October 28th inclusive we have inserted 5,406 cramps in the north-west tower, and 2,961 in the central tower and transepts, a total weight of 13 tons, 4 cwts.

The zig-zag lines in the masonry show that the north-west tower was split right through from top to bottom. These cracks were equally as bad on each of the other three sides. In fact, the tower was split from floor to roof into a number of separate sections, trusting entirely for support to broken iron bands and bolts, and fractured wood tie beams.

To prevent any possibility of further spreading of the tower walls, we have (in the passages which are in the thickness of the walls) constructed strong reinforced concrete beams. Six have been provided at various heights, the top one of these forming the roof-plate. The four octagonal turrets are anchored to each of these beams, well braced at the angles. It is estimated that each of these beams will stand a strain of not less than 800 tons.

It is intended to carry out this same method of bonding the four walls together in the central tower. One beam is completed in the lantern and the reinforcement is in position ready for the concrete in the clock chamber, 125 ft. above floor level. The



SOFFIT OF ARCH CRACK FILLED WITH WOOD WEDGES  
Ringing Chamber, North-west Tower, 110 feet up

photograph on page 175 shows the metal reinforcement before the cement is put in, and it will be observed that at each corner the metal is also placed at an angle of 45°, thus forming a strong tie.

A similar beam has also been constructed on the clerestory passage floors, in both north- and south-west transepts.

At different periods, some of the cracks which were seen by the public and of easy access, have been filled in with pieces of stone and pointed up with mortar. In two particular instances, the soffit of the two arches that had collapsed at some time, some 100 ft. above floor level, had been filled in with blocks of wood, and actually tightened with wood wedges, then plastered over with mortar, and lined out to imitate masonry.

Up to 28 October 1925, inclusive, we have forced into the walls and surroundings of the north-west

tower 22,944 gallons of grout, equal to 3,671 cubic ft. of space, and weighing approximately 104 tons, and into the transepts and the central tower, 10,377 gallons of grout equal to 1,659 cubic ft. of space, and weight 47 tons. What with the grout, the constructing of the reinforced beams, and rebuilding of the masonry in different parts, and reinforced concrete floors, we have used a total of 446 tons of cement, and 471 tons of sand. To September 30, 1925, inclusive, 2,177 new stones, equal to approximately 1,766 cubic ft. of space, have been used.

This does not mean that we have increased the total weight of the building, far from it. Against this we have to calculate the hundreds of tons of *debris*, of timbers and ironwork which we have removed.

Even at the risk of recapitulation, I think it will be helpful to give the proper sequence of operations in repairs of this character which is as follows:—

No. 1. To shore and timber up the walls, and to centre the arches, in order to relieve them of as much weight as possible, and also to prevent any broken pieces of stone from falling.

No. 2. To wash out with water, and grout up, from the bottom, with cement, the masonry or brickwork, rendering the whole mass monolithic so that any operation may be as free from risk as possible.

No. 3. To replace broken masonry and to insert the necessary bond stone.

No. 4. When all this has been done, steps may be taken to strengthen the foundations.

It is evident that to alter this sequence in any way is to court disaster: not a stone should be moved, nor cut open, even to remove old rusty ironwork, or rock until all grouting is done.

Before closing, I would like to say that owing to the modern application of compressed air, we are making considerable saving in the total cost, which in some cases amounts to only one-twentieth of that under the old methods of hand labour.

All old stonework is cut out by tools that are known in the foundries as Little David Chippers; these are also used for dealing with the old ironwork; the new stonework is being dressed by the same tool. The carving is executed by specially constructed compressed air chisels, capable of cutting to a minimum of 1/100 part of an inch. Air drills and saws are used for carpentry work, a compressed air and water sprayer invented by Mr. Godfrey, is employed for scouring the walls after grouting, and also for laying the dust created by the jackhammers, thus enabling the drillers to work in confined spaces without any ill-effects from the dust. Further, compressed air is also brought in requisition for forcing water from the Corporation supply to tanks on the top of the towers, some further 200 ft. up; thus doing away with the necessity of power driven pumps.



It must not be forgotten that the central Norman tower fell with the rest of the cathedral in A.D. 1195. It was re-erected by St. Hugh about A.D. 1200, but again fell—so that we now retain the third tower—and this has proved none too strong. We have driven small trial drill holes into the four great piers carrying the main tower and find they are solidly built; only one hole is done at a time, and is immediately grouted up solid with cement before a second hole is commenced.

nave pavement, have been carefully repaired and some 25 beautifully carved bosses have been uncovered and cleaned; where they show remains of gilding in the old days, this has been similarly restored, producing a most excellent appearance from below.

Photographs of four or five of these bosses will be appended, for it shows that although they are so far from the ground, they have been executed with amazing care and skill—in the spirit so well appreciated and described by Ruskin.



BOSS ON HORIZONTAL LINE

East side of Vaulting of Lantern under centre Tower  
125 feet above floor of Nave

Date probably A.D. 1380

The spandril walls of the four great arches carrying the tower have proved to be very hollow in certain places, and these have now been solidified; but another very disagreeable discovery was that the transept walls were not bonded into the tower walls and as to these we have given special attention for some considerable time. It is surprising the amount of work that is taken in by the early English walls of the north-west transept.

The groined arches in the central tower which carry the belfry floor at a height of 125 ft. above the



BOSS IN VAULTING OF LANTERN OF CENTRE TOWER  
125 feet above floor of Nave

I wish to call attention to the very excellent photographs taken by Mr. S. Smith, photographer, of Steep Hill, Lincoln, in all parts of the fabric—many by flash light and often in very dangerous positions. We owe him a great debt of gratitude, and sincere sympathy for the great loss of negatives by a fire which occurred on his premises.

I would like to add my appreciation of the kindness and help that I have received from the Dean and Chapter, Sir Charles Nicholson, members of the two committees, Mr. Godfrey, and for the loyal co-opera-

tion of all the workmen employed. It is only by this kindly feeling that this method of repairs has been brought to such a pitch of perfection. During the whole of the work we have been providentially and safely guarded from any serious accidents, for which we are deeply grateful.

We find that by care, and proper application of material and the excellent tools we use, we have, in places, been able in one hour to do work which 20 years ago occupied a week, and which then cost £1, but to-day one shilling. The result is that the total cost, so far, has been most moderate and bears no comparison with what the old system would have amounted.

The expense to date on the north-west tower

amounts to £29,319, and on the central tower and transepts to £11,317.

The whole of the work is carried out by direct labour by local workmen; the leading men having been specially trained for the specific branch upon which they are engaged.

In conclusion, I would add that it is no exaggeration to say that such speed, efficiency and economy have never been approached in any other cathedral work. By the methods described vibration is reduced to a minimum: we avoid the nuisance of covering the whole cathedral with dust, and nothing is done to mar in the smallest degree, the ancient character and dignity of this, the finest cathedral in the British Isles.

## Discussion

(THE PRESIDENT, MR. E. GUY DAWBER, IN THE CHAIR.)

The Very Rev. The DEAN OF LINCOLN (Dr. FRY): I particularly want the audience to see one or two of the models that Mr. Godfrey has with him showing the result of grouting. I do not know, Mr. President, why I was selected to move this vote of thanks, because I really am a spectre at the feast. My business has always been, since 1922, to ask for help, and the consequence is that I find my best friends when I meet them turn and look into the shops, and if I venture on even a neutral discussion, like the stability of the franc, they change the conversation. But I should like to claim that one reason why we have been so successful is, that we are the happiest of Chapters. The four years that I have had since this serious work started have been to me, and, I believe, to all other members of the Chapter, a time of great personal growth of friendship and confidence; and so I am glad of the opportunity of saying that it is not through me, but through the security afforded by the unity of the Chapter, that we have been able to back up the work. I am glad to have in this room with me my Sub-Dean, to whose intimate skill in keeping accounts we owe the fact that we are ready for an audit to-morrow morning if it were forced upon us by public indignation. I pride myself a little bit on the fact that when the vacancy came, some years ago, in the clerkship of the works, I secured the appointment of Mr. Godfrey, because I ventured to see, behind his quite unassuming manner, all that we were likely to want in the way of skilled and loyal help, a loyal help which goes so far as preferring to overwork himself rather than to add to our expenses in having the work supervised. As to Sir Francis and Sir Charles, they have become much more than advisers, they have become close personal friends.

It is interesting, perhaps, just to mention that we did not think we should need so much, but we do think we shall need quite £75,000 to finish; it might be £76,000. I beg to move a sincere vote of thanks to Sir Charles and Sir Francis for their papers.

Mr. BASIL MOTT, C.B., in seconding the vote of thanks, said: It is a real pleasure to me to find that a very old

friend, Sir Francis Fox, is still willing, as he always was, to give his great engineering experience, his life's experience, to help anyone in a difficulty, and is still able to deal with national interests, and to help in any way in a national cause. I had the privilege of going, with Sir Francis Fox and others, to the Cathedral. I realised the magnitude of the work before them, and I also realised the wonderful manner in which they were dealing with a problem of great difficulty. I am extremely interested in grouting. I was fortunate enough to be resident engineer on the first system of underground railways when grouting was my chief concern, and I think I was the first person to use the grouting machine in the early stages.

May I say that the value of the association of Sir Charles Nicholson and Sir Francis Fox cannot be exaggerated. I think that if we could draw the bonds of the architectural and the engineering institutions closer together, it would be in the interests not only of the two institutions, but of the community as a whole. I happened to have the privilege, now, of being Chairman of a Committee which consists of architects and engineers and which is dealing with a problem of some national interest and I should like to say that no one appreciates more the great value of the assistance that is being given on this Committee by the architects than do their fellow colleagues the engineers.

Mr. R. S. GODFREY (Clerk of the Works of the Cathedral): I have here two or three good samples of grouting and I have got samples of cement which were put into the triangles early in 1922, and there is showing neither sign of expansion nor contraction, which is a great point to be considered in grouting. I have also got samples of the Delta metal twisted in the same manner that we use in the grouting and the reinforcement. There are three sizes; we use them to 1 inch square. And we have the left-hand and the right-hand twist; the reason of that is to prevent any twisting. If there is spreading, there is no chance of it unscrewing; one turn grips against the other. Here is a piece of split stone, which I have had cut out to show the effectiveness of the grouting, sticking the two



pieces of stone together. And here is a very fine sample of cement grouting. I ask you particularly to notice that the cement is blown into almost the smallest interstices, and lumps of mortar are almost bound to the cement, encasing it like the shell of an egg. Here is another very good sample, showing pieces of stone grouted together; that has been in since September, 1922. The date is on the samples of each trial job.

Dr. D. H. S. CRANAGE [*Hon. Associate*]: I could not help feeling what a very unromantic age the early part of the twentieth century was, from the point of view of superstition. In the early part of the twelfth century, when the tower of Winchester Cathedral fell, it was because the body of Rufus was there. When the East end of Durham Cathedral was left they knew why they could not build it; it was because the holy St. Cuthbert, who objected to women, was buried close by. In the present day we have not that easy reason for deciding what is wrong with ancient buildings; we go to work in a very prosaic way. But we have all listened to the papers to-night and have felt that the romance is nowadays just as great, only of a different kind, and we must be filled with admiration not only for the patience and skill but for the tremendous interest and romance which this work brings home very strongly to our minds. We have to attend to the great laws of Nature, and if we go earnestly and patiently to work, we shall find out the secrets. I am sure we owe a very great debt of gratitude to the architect, the engineer and the workmen who have carried out this work, and I can only echo what has been said already, that we are proud to be here to-night and to hear of this wonderful advance which

will make secure for all time the Cathedral which, I believe, Ruskin called "The Queen of English Cathedrals."

Dr. J. W. MACKAIL: Lincoln Cathedral is, as has been well said, the Queen of English Cathedrals; it is the cathedral of which William Morris said that as soon as he got inside it he felt perfectly happy; there was no more to be said. That such treasures should be saved to us, as they will be saved, for many and many generations to come, by the skill and genius which are now to be applied to their preservation, is a thing for which we are all, I am sure, most thankful. May I just, in one word, congratulate my old friend the Dean on the brilliant success of his own efforts towards this great work, and wish that he and all others concerned may live to see it completed to their desire?

The PRESIDENT: I have now great pleasure in putting the vote of thanks to the two speakers for their papers to-night, Sir Charles Nicholson and Sir Francis Fox. It must be a matter of very great gratification to us as architects to feel that this national building is now in safe hands.

Carried by acclamation.

Sir CHARLES NICHOLSON, in reply: Thank you very much for your kind vote of thanks. Just now the wish was expressed that the Dean, Mr. Godfrey, Sir Francis Fox and myself, the Archdeacon and the others here might live to see the repairs to Lincoln Cathedral carried out. All I can say is that if we live to see them finished we shall be very old gentlemen indeed.

Sir FRANCIS FOX also replied.



# Review of the Work submitted for the Prizes and Studentships, 1926

BY H. S. GOODHART-RENDEL [F.]

## THE SOANE MEDALLION

THE design bearing the pseudonym "Dorvel" comes most near of any to the standard which the jury must exact if the medallion is to be awarded. That it does not reach this standard is due to the unsuitable character of its elevations. These are not unpleasing in themselves, and would serve well enough to veil the stack-room of a classical library. In a well-ordered city, however, the stack-room of a classical library would not be placed so as to front on to a large square, nor would the appearance of such a building be properly, or willingly, adopted for its head office by the directorate of an important bank.

The sense of *character* in architecture, like the sense of humour in life, is of great value to those who have it, and made little of by those who have it not. That it is not indispensable in the production of beautiful buildings may be seen in America, where the sense is at present little developed, and yet where many beautiful buildings are produced. That it is extremely valuable both to the architect and his public may be seen in France, where the national instinct for the appropriate gives charm and interest even to designs the least inspired and the most routine. Though loosely spoken of as a sense, it is—need I say?—nothing of the sort, but rather an intellectual perception gained consciously and unconsciously from experience. It is what Adam and Eve cannot have had when they named and classified the objects of creation; it is what the nonsense story supposes them to have had when it makes Adam say "Hullo! that looks like a pig: let's call it a pig!"

"Dorvel's" proposed building does not look like a bank, and nobody would call it a bank until they had learnt that it actually was one. The emphasised piers of its upper stories suggest that the floors in this part are mere secondary divisions of a large space (the galleries in a stack-room, for example), or, alternatively, that there are long spans within, demanding great strength from the piers which support them. The very broad piers at the corners, pierced with very small windows, could have no constructive justification in any case, not is it easy to imagine their being the logical expression of any reasonable plan. The treatment of the frieze suggests a building dedicated to the humanities, and is as out of place in a commercial building as the classical fables with which advertisers of building materials hope to catch the eye of the half-educated. In itself it is a good frieze, with a good cornice above it and, of its kind, a good wall-design below it.

The general unsuitability of the façade of this design is a great pity, since the plans have peculiar excellences and compare favourably in almost every respect with all of the others submitted. Before speaking of these plans I must point, with regret for the necessity of constantly finding fault, at a defect in the design (otherwise excellent) of the banking hall as shown in section. Three arches are

shown in the three intercolumns of the peristyle where the main entrance is. What are these arches for? I presume merely to differentiate the entrance intercolumns from the others. Arches are constructive features and cannot be used in this way. Had the entrance columns been wider than the rest, there would have been a justification (intellectual, if not physical) for their arcuation; seeing that they are not, the observer is forced to suppose either that the arches are vanity or that the lintels in all the other intercolumns, having no arches, are in danger of breaking.

"Dorvel's" plans, as I have already said, are excellent: the points in which they fail are of too little importance to call for comment; the points in which they succeed are those essential to the solution of the problem before the competitors. This problem—may I remind you?—was to place upon a site measuring two hundred by one hundred feet the head office of an English bank, providing all the usual accommodation required in such a building, this accommodation being specified in the programme. One of the long sides of the site is supposed to face a large square, the short sides are bounded by streets sixty feet wide, and the remaining long side lies along a back street of little importance.

The paramount feature in such a building is the banking hall, upon the proper placing of which the success or failure of the plan must depend. The banking hall must be lofty, and therefore must run through more than one storey of a building where the need for loftiness does not exist elsewhere. It may be, and probably must be, lit from the roof. Obviously, therefore, it should be in the midst of the building, and assume more or less the form of the court of an exchange glazed over for protection from the weather. Round this hall on the upper storey must run a gallery or passage, either open to or screened from the hall, to give access to the rooms on the various frontages.

Second in importance to the banking hall is the board room, for which if there were only the convenience of that room to be considered various positions would be eligible. I think, however, that on the site specified in this programme there is only one proper place for the board room, and that is where "Dorvel" has put it—on one of the side streets in the middle of a return front. The site is in form of a double square, therefore any reasonably proportioned banking hall placed in the middle of it is bound to leave broader spaces at either end than in the middle and at the back, and it is only in these broader spaces there will be room for the board room. To put it at the back is unthinkable, but to put it centrally in front is tempting. A breadth of one hundred feet, however, is too narrow for a board room, a passage, a banking hall, another passage, and a room at the back; and those competitors who have attempted this subdivision have been forced either to make the divisions



too small or to squeeze one of the divisions out altogether. The consequences of such wrongdoing we shall see immediately, but before leaving "Dorvel's" design I will ask the other competitors to observe the way in which the adoption at the outset of the right *parti* simplifies the business of plan making. "Dorvel," by not trying to force any preconceived notion of architectural effect upon the stubborn utilities of the problem before him, has made a plan which is not only the simplest and the most convenient of those submitted, but also the most architectural—a plan which only needs more suitable elevations to make a noble building worthy of its purpose and of the skill and labour of its author.

The plan of "Varet's" design shows the board room placed in the middle of the main front, and interrupting the circulation of the floor on which it is placed. The passage which should run behind it has been squeezed out; otherwise this is a plan with many merits, none perhaps striking enough to demand especial indication. The banking hall on the ground floor is too full of piers in effect, though actually these are not placed so as to be unduly obstructive. The staff entrance and the public entrance to the foreign department balance each other on the main front, thereby giving undue prominence to the former and depriving the latter of its proper importance. The elevations are well designed of their kind, and appropriate enough. The wrong position of the board room on plan has enabled "Varet" to obtain the emphasis of the central portion of the main façade which the soul of man normally desires. Such emphasis in this problem should rather have been laid upon the entrance and the entrance alone—since it is the way to a far larger and more important room than any which shows upon the façade. "Varet's" doorway appears no more than the entrance to the building, which is seen. The architect alive to the full possibilities of his design would have made it appear, as it were, the mouth of a tunnel through the building which is seen to something vaster beyond.

The design labelled "Euxine" has this big entrance, and profits greatly by it. The plan suffers in health from a misplaced board room, but otherwise has some merits. The section of the banking hall, however, is bad and narrow, showing every symptom of disease due to overcrowding—the board room again! The heavy cornice in this design has no existence in the preliminary esquisse and greatly changes the character of the finished elevations from that first intended.

"Vitation's" esquisse is attractive at first sight, but the setting back of part of the upper storey is a reckless thing for a competitor to commit himself to at the outset of a problem likely to prove a complex one. This, I think, is what "Vitation" has found; the finished plan of his upper storey is probably different from what he hoped it would be in his first dream of Devonshire House. The back block of his plan is reduced to a ridiculously thin ligament of strung out typists' rooms and passage, and the ground floor plan shows a circular lobby at either end of the banking hall without any apparent justification. Altogether there has been too much preoccupation with scenic effect in the making of this plan; and the artificial reduction of the depth, on the upper floors, of a

site already inconveniently shallow, has produced as many bad results as might be expected. Not that "Vitation's" arrangement has not some good points; it has several, but they do not and never could counter-balance his initial wrongheadedness. He appears from his half-inch scale drawings to be able to design detail of charm and distinction.

"Finance" aims at palatial character and secures it; though not positively unsuitable for a bank his elevations do not suggest that behind them can be light and pleasant rooms for people to work in. The singular *parti* which he has taken in the arrangement of his plan results in the banking hall spoiling everything else on the ground storey and cutting the storey above into two. The architecture has merit of its kind, but the smallness of the windows would make it entirely unsuitable for England.

"Lexis" puts a useless dome over the centre of his long banking hall, treating that hall as a Greek cross with lengthened lateral arms, a self-contradictory shape which can never look well—the dome being too important as a mere incident at the crossing of two galleries, and not important enough as the central feature of so large an area. "Lexis's" board room is really dreadful.

"Lombard" interprets the permission given in the programme to use mezzanines as allowing a whole upper basement storey between the basement proper and the ground storey. This frees his principal storeys from the slight congestion apparent in many of the other designs, but "Lombard" does not seem to have profited by this freedom, though he has placed his board room correctly. His elevations are more absolutely unsuitable in character than any others submitted; if they suggest anything, they suggest a Woolworth's store.

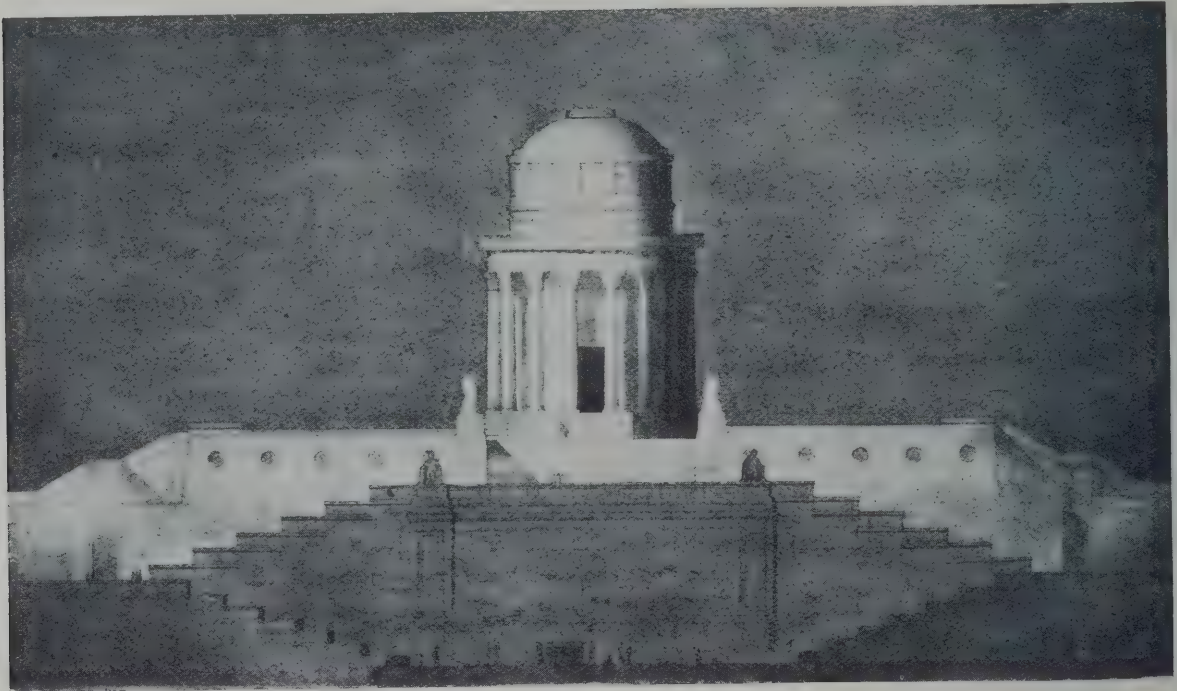
"Pardi" submits two designs, one shown in his esquisse, the other in his finished drawings, and accompanies these with a composition of M. Brandt's and M. Simonet's ironwork details to half-inch scale. The design shown in his finished drawings, if it called for serious judgment, would be at once put *hors concours* on account of its departure from his esquisse. It does not, however, call for serious judgment; rooms seven feet across, and a board room fifteen feet across, make the plan a curiosity in its way; and the ironwork, with its familiar baskets and its floral forms compressed into a sort of galantine, is of the luxurious character delightful in the surroundings of beautiful and expensive women but singularly out of place as a purdah screen for bank clerks.

"Blisco" also submits two designs, one shown in his plans, the other in his elevations. His manager's room is lit by threequarters of an immense arched window into which the party wall runs; his board room is lit by a row of glorified loopholes. For no discoverable reason a small waiting room on a lateral façade is given another immense window, where all the surrounding windows are of reasonable size. There is, I believe, a school of thought in revolt from Victorian theories of architectural truth which glories in mendacity such as this, but to the reasonable man there can be little intrinsic appeal in either the inconvenient avowal or the purposeless negation of an architectural fact. Experience teaches us, however, that so far as a good plan will design its elevations for us, it will do it better than we should, and that our proper

function is to let it do all it will and then step in with the finishing touches of emphasis and adjustment. "Blisco's" elevation is certainly not worth imposing for its own sake

THE TITE PRIZE.

The design bearing the pseudonym "Bonzo," to which the Tite prize is awarded, owes its supremacy to qualities



A MONUMENT TO A NATIONAL HERO. By A. Calvaley Cotton  
(Awarded the Tite Prize)

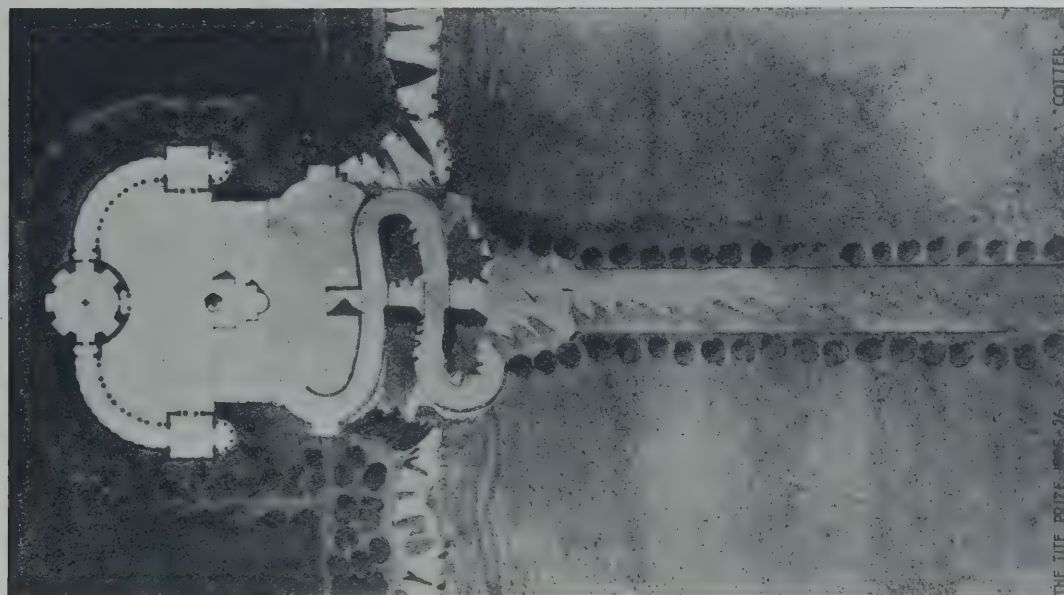
upon a plan which it does not fit; on the other hand, if it *did* fit, it would suggest that there was something wrong with the plan.

which will not appeal to the romantically minded. It is appropriate, it is reasonable, it is controlled, it is realisable, it has just that sober gravity and dignity which its purpose



demands, without any exaggerations or sentimental fantasy. To some minds, the notion of a monument to a national hero demands for its realisation that which ignores the appropriate, which transcends the reasonable, which scorns control, which reckes nothing of realisability; in short, the word "hero" sends some people off their balance altogether. Perhaps in a

tended towards pettiness, and "Bonzo" is more lonely than he should have been in his perception of the proper scale for a monument amid the specified surroundings. His esquisse suggests that this perception has come to him in the working out of his design, since his first notion looks more like a summer-house in a back garden than a commemorative hall on a cliff forty feet high. In this esquisse,



A MONUMENT TO A NATIONAL HERO. By T. Murray Ashford

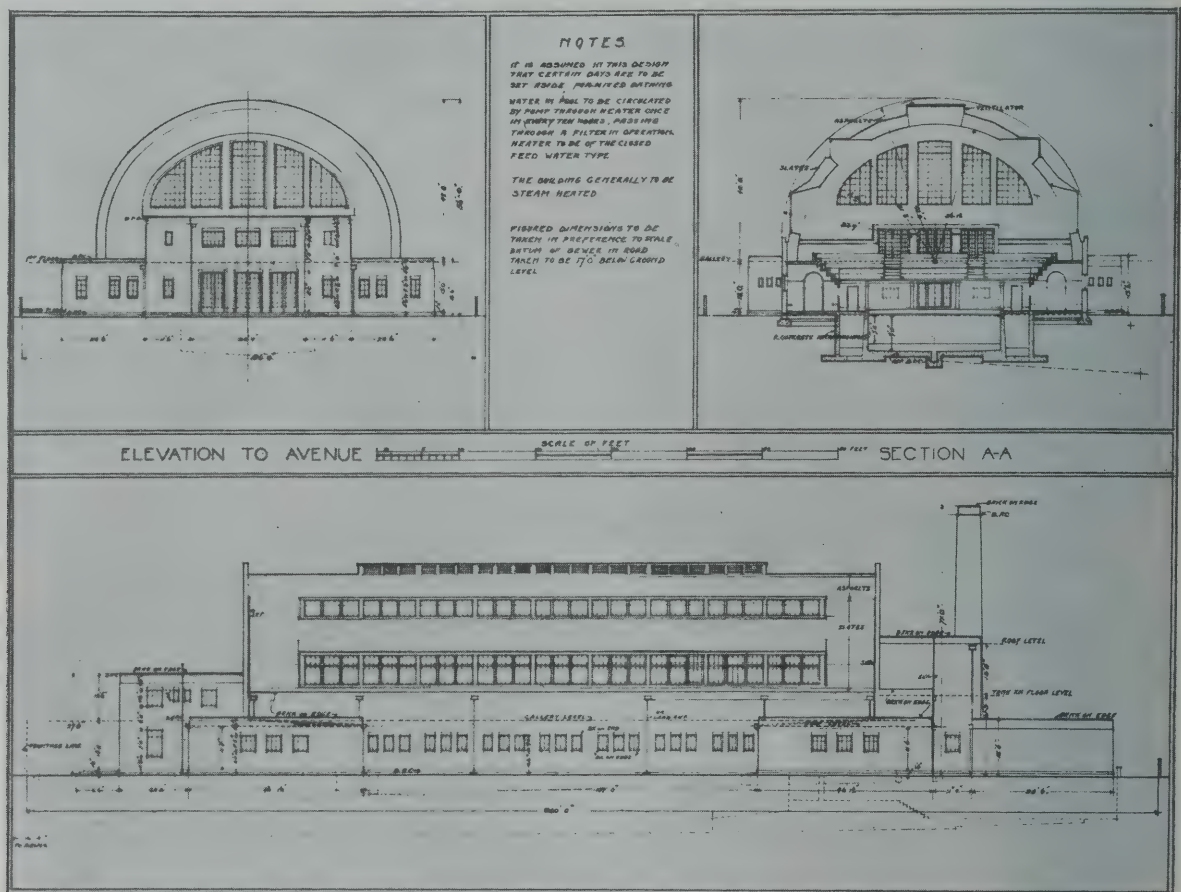
competition such as this a certain amount of chimerical fancy would be excusable, seeing that no more emotion would be allowed by the programme than could be set upon a platform 200 feet by 120 feet. I do not think it regrettable however, that, with two exceptions, none of the competitors for this prize have shown even the mildest symptoms of megalomania. Rather have they

however, the appropriate simplicity is realised, and this simplicity has been the making of the finished design. The detail of this design is good—better, I think, than the general contour of the dome and its drum. The latter appears to me too high for the former. "Bonzo" has plainly been thinking of the effect of his temple seen from below and has been alarmed lest in perspective the cornice

of the peristyle should hide too much of the drum. He has, therefore, heightened the drum, but he has also flattened the dome. I think that if his design were built as it stands, he would find that from one standpoint the dome would look right but the drum would look too high, and that from another the drum would look right but the dome would be invisible.

"Bonzo's" steps up the cliff are adequate and in good proportion—the terrace also, by appearing well-shaped,

related in style and form to the design of the exterior. The exterior in itself has great charm but lacks the true monumental character. For a pump room at a spa it would need little adaptation. The manner of the approach up the cliff whereby a single road in lacets is crossed by a monumental flight of steps is none the worse for being borrowed from a design well known to many of us: it is an excellent expedient and one very suitable to the hypothetical conditions of this site. The road, however, is a little steeper



A SWIMMING BATH. By John William Wood  
(Awarded the Grissell Gold Medal)

shows that he has conformed his design skilfully to its obligatory dimensions. The lay-out of the terrace, however, is weak and meaningless.

"Cotter's" design shows a far more imaginative solution of the problem. His esquisse is extremely good in its crystallisation of an idea, and the working out of this idea has been faithfully and logically done. Unfortunately, the idea is not of the most appropriate—a winged building of this kind should close a vista; not stand bleakly upon a cliff exposed to view from all angles. Also, the interior of the hall shown in the section is entirely un-

than it need be—a wider spread of the lacets would have done no harm.

The same manner of approach appears in "Koko's" design, but so unskilfully applied as to leave the contour of the flanking cliff in insoluble doubt. "Koko's" commemorative hall is of absurdly small scale; the oblong form chosen for it, though suitable in itself, is one for which there is not room on the platform specified.

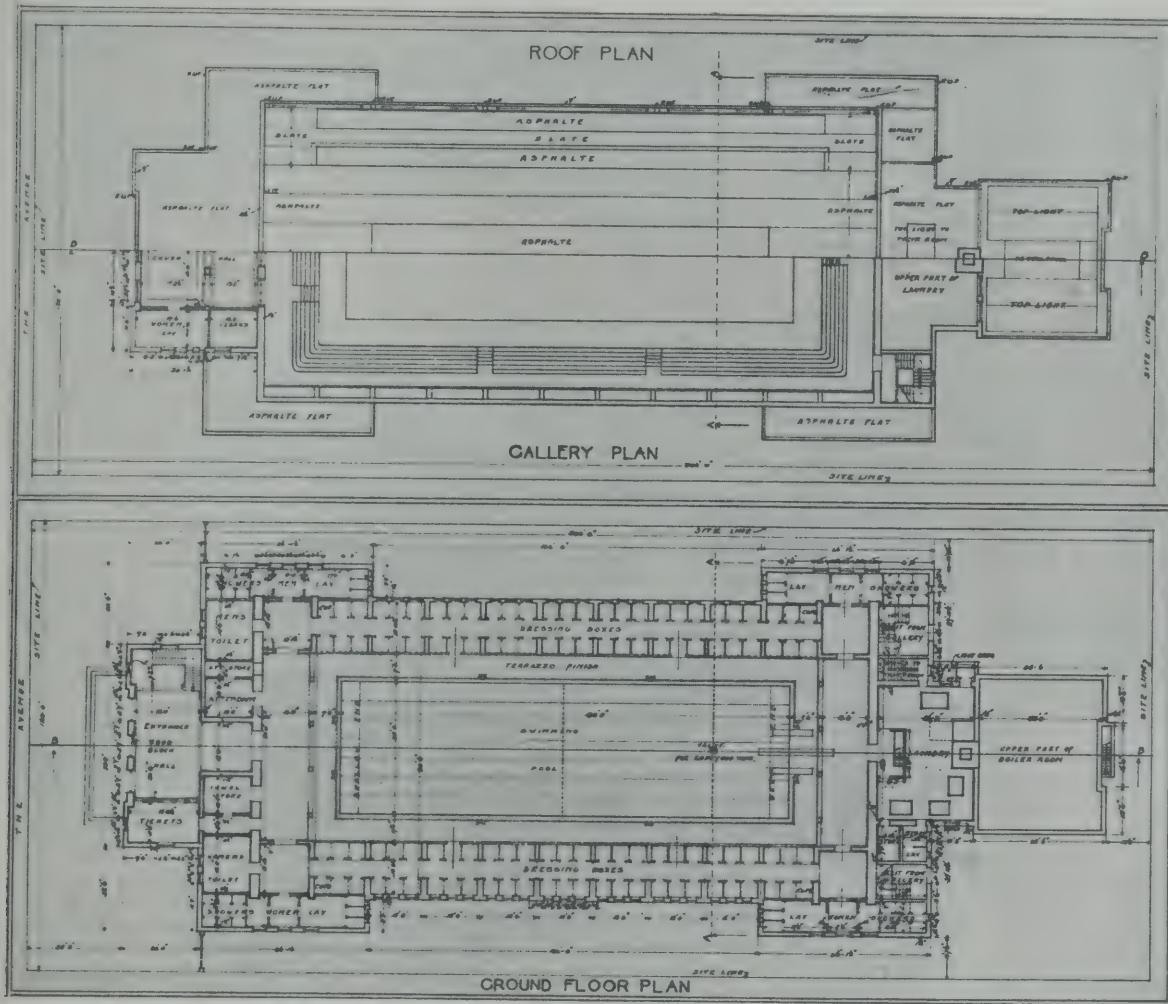
"Ulysses" also tenders an oblong building, of more adequate scale. In his esquisse he proposed a central



cascade down the cliff which he wisely abandoned in his working out. Immensely lofty portions of his building are walled off as "cloak rooms" and "storage." "Ulysses" must really cultivate common sense.

So, too, must "Rizz," who reads his programme oddly. As a commemorative hall the Albert Memorial would prove somewhat draughty, yet "Rizz's" "hall" provides little more shelter than does the Victorian

porches he has regretted in the development of his design and has abridged in a manner which only makes matters worse. In other respects "Kuklos" has evolved his esquisse into a really remarkable collection of souvenirs of Paris, some of which, the lower group of steps for example, are really handsome in themselves. Unfortunately, in order to get them all in he has lowered the scale to a point at which all that should be majestic is



A SWIMMING BATH. By John William Wood  
(Awarded the Grissell Gold Medal)

masterpiece. As a design for a monument having no relation to this competition "Rizz's" project shows good outline and proportion. His detail is respectable, of the style current in the nineties of the last century.

"Kuklos," in an esquisse drawn in a tight style likely to prove harmfully constrictive of first notions, shows a scheme not very characteristic but reasonable enough in the main. It is disfigured, however, by useless colonnaded porches stretching out on either flank. These

merely trivial. The contour of his steps also is such that, from below, his building would appear disagreeably buried in the ground.

"Moss," on the other hand, has managed his steps admirably; his platform with the approach to it is as good as anything in the room. The building surmounting this platform, however, is of bad form, a square with a small square tower rising out of the middle of it. Seen from a distance its size would be impossible to estimate.

and its silhouette on the diagonal would be unpleasing. In character it seems fairly suitable, and had it been slightly larger and cruciform externally, so that the tower lines were carried to the ground, it might have been successful in scale and outline.

"Hatikuoh" assumes a rocky promontory instead of a cliff, which is to misread the programme. His plan is a Greek cross with the corners filled in. He provides car parks at the bottom of the cliff and interrupts his great steps with a "rest place" which makes nonsense of the whole staircase. The dome with which he surmounts his hall seems curiously out of character with the remainder of the design, but in itself is of good contour, easily readable from a distance.

"Avanti" is enormously ambitious and deserves credit for enterprise. He conceives his commemorative hall as standing on the very brink of the cliff so that the entrance to it must be at the back. The cliff itself is faced with masonry and led up to by an immensely broad flight of steps. Having reached the cliff, pilgrims to the hall must turn right or left and complete their ascent up flights of steps leading to the platform on either side of the hall. On this platform they must proceed to the back of the building where is placed the great entrance.

The object of all this ingenuity is an attempted stroke of drama. I have said that the cliff is led up to by a great flight of steps, but what is that gateway in the cliff itself to which these steps appear to lead? Gaze through it and you see in the half-light more steps and more steps again rising to what? To the cenotaph of the hero buried in the bowels of the cliff but brilliantly lit from an orifice in the floor of the hall above.

Now this is an anti-climax, or rather a climax turned the wrong way about. Having looked up at the cenotaph of the hero, what is the good of climbing to the hall in order to look down upon it? If the city had been on a plateau and the commemorative hall on the plateau's edge, "Avanti's" adaptation of the tomb at the Invalides would have been suitable enough; an inaccessible opening in the face of the rock through which the cenotaph could be dimly seen would be dramatic enough from the plain below. The architecture of "Avanti's" scheme is magnificent in intention but not happy in the character of its detail, which suggests to me that of a casino of the second Empire.

"Scale" has still more magnificent intentions and still less happy detail, and I fear that nothing whatever can be said in praise of his scheme. Its chief peculiarities are the gridiron of colonnades spread over the approach to the hall and the high sham dome raised over the real dome of that building.

"Amber" has missed the character of a memorial altogether and draws in a curiously old-fashioned manner which suggests Early Victorian research.

"Omega" should study more before he attempts problems of this kind.

#### GRISSELL MEDAL.

For the Grissell Prize this year only one design has been submitted, but had there been many more I think it likely that this one would have been the winner. In it the programme is admirably realised, and both plans and elevations are models of their kind.

#### ALFRED BOSSOM TRAVELLING STUDENTSHIP.

For the Alfred Bossom Travelling Studentship there are three contestants, but here again there can be no doubt of the superiority of the successful design. "Huck" and "Chota" submit ordinary schemes save for the extraordinary vagary by which "Chota's" shops are grouped round a formal garden; but "Hat's" proposals have the novelty that comes from doing a simple thing a great deal better than it is customarily done. "Hat's" scheme and calculations show care, but the price of 1s. 3d. per cubic foot which he allows for his building is obviously at least 6d. below the mark. Also the various maintenance and caretaking charges for which he allows £100 per annum would probably amount to twice that sum. Nevertheless, the whole project is reasonable and well thought out, and the architectural treatment charming.

#### THE OWEN JONES TRAVELLING STUDENTSHIP.

The Owen Jones Studentship, like the Grissell Prize, is only aimed at by one competitor this year, and again, as with the Grissell Prize, that competitor has done very well indeed. "Michael's" "theatre in a private house" is decorated as such a room should be; both the painted panel and the large scale embroidery detail are admirable.

For neither the Henry Saxon Snell prize nor the Essay prize is there any age limit, the intention of both being rather to get results than to give experience to the young student. Hospital planning, owing to the rapid developments of medical theory and practice, is a science that never stands still, and the purpose of the Saxon Snell prize is to encourage progress and experiment in the architectural provision for up-to-date requirements. The purpose of the Essay prize is to obtain for the profession valuable contributions to knowledge rather than to reward young architects for undergoing the pains of literary composition.

#### THE ESSAY MEDAL.

This year three essays have been submitted—one by "Vinci" on "The Psychology of Architecture," one by "Gai" on "The Religious Buildings of the Parsis," and the third by "L'Inconnu" on "The life and work of James Gibbs." Peculiarities of punctuation make "Vinci's" essay troublesome to read; when they have been discounted his English appears as admirable. He writes with skill and a sense of literary beauty; he makes to a large number of authorities a large number of references, of which no more than the usual proportion is unnecessary; he divides his material sensibly and orders it well. The defect of his essay is that which he himself has perceived when he was forced to put on the title page, beneath the heading "The Psychology of Architecture," the words "(in outline)". His essay is not an essay, it is the skeleton of a book. As a testimony of study it is superb; as information it has little value; as reading matter it has the effect upon the mind of an index. If "Vinci" would win the Essay prize in another year he must choose a smaller subject, must quote less and construct more.

"Gai's" essay is a mass of information, very fully illustrated by photographs and drawings. After explaining the theory and ritual of fire-worship, the author traces the developments of buildings dedicated to the cult from earliest times to the present day. The continuity of tradi-





tion which he exposes is interesting, but does not seem to have saved this particular architecture from latter-day degradation. The jury recognises "Gai's" industry and perseverance, but does not feel that either his presentation of his material or his power of expression in the English language is such as to justify the award to him of the medal.

"L'Inconnu" submits a monograph on James Gibbs, expensively bound and full of photographs and drawings. With great industry he has examined and attempted to identify the works of Gibbs mentioned in that architect's own book; in the manuscript memoir in the Soane Museum, and in the Dictionary of Architecture. As a document his list of Gibbs's works has value, and his collection of photographs is interesting and representative. His account of Gibbs's life is probably as full as it can be made. His drawings are painstaking, but those showing architectural detail suggest that he has but slight acquaintance with the forms and proportions so meticulously laid down by Gibbs himself. He also is lacking in the critical faculty, giving unsupported opinions of a kind not likely to command much respect on the merit of the buildings he describes. The jury, while applauding his industry, has therefore not thought him qualified for the reward for which he competes.

THE HENRY SAXON SNELL PRIZE

The subject for the Henry Saxon Snell prize this year

was an Out-Patient Department attached to a General Hospital of 200 beds, and has attracted two competitors. For some time it has been apparent that the old system of planning such a department in which out-patients re-pass through the hall after receiving medical or surgical attention has ceased to be thought satisfactory. Experiments that have been made towards the obviating of the defect by means of external passages have brought disadvantages in their train, and the possibilities of compromise call for systematic investigation. Apparently neither of the competitors has been alive to the existence of this problem, and their schemes are of the long-accepted kind which there is no necessity for a competition to produce. "Ubique" submits an inconvenient arrangement of two storeys with an elevation which calls urgently for plastic surgery of a drastic kind. "Germ" submits a better scheme on one storey, which of its kind has no very serious defects. It is very well presented; the elevations are poor, but reasonably honest.

Over the measured drawings submitted for the Silver Medal I should like to draw a veil. In the best of three sets submitted there is to be seen the phenomenon that a student who can draw Early Renaissance carving accurately enough supposes that the flutes of a spirally fluted column can be ruled in diagonally on elevation with a set-square.

## Vote of Thanks to Mr. Goodhart-Rendel

(THE PRESIDENT, MR. E. GUY DAWBER, IN THE CHAIR).

Professor E. A. GARDNER, Litt.D. (Vice-chancellor, University of London): I have to move a vote of thanks to Mr. Goodhart-Rendel for the charming and witty way in which he has carried out his duties. I suppose very few people who have not had to do such a thing can realise what an extremely difficult thing he has had to do, and I think you will all agree he has done it admirably. His criticism has not only been witty, but I think it has also been kindly. I do not say he has not pointed out anybody's faults, criticism would be of very little use if the critic refrained from doing so altogether—but I feel that there is no malice in it, and those whose works he has criticised will feel grateful to him for the criticism rather than offended at any detail.

The PRESIDENT: Professor Leslie Wilkinson, Honorary Secretary of the Royal Institute for Australia, is with us to-night, and I am sure he would like to second the vote of thanks.

Professor LESLIE WILKINSON [F.]: We have listened to-night to an extraordinarily valuable and interesting criticism. I am sure that the competitors will have appreciated it, and no doubt some appreciated it more than others; I suppose it is pleasanter to listen to favourable criticism than to criticism with a little bit of "spur" in it. But a spur is always useful, and I am sure they will have accepted the criticism in the spirit in which Mr. Goodhart-Rendel made it. I think that to-night a new departure has been made in having this criticism on the same night as the announcement of the awards; and it seems to me that is a move which will be very welcome to the student body. I think it is

borrowed from the Royal Academy. I am certain it must have given some very exciting moments to the competitors, and added very greatly to the whole interest of the proceedings. Criticism such as we have heard to-night is a thing of which we have far too little. I think our modern architecture would be enormously improved if such criticism could be applied very much more generally. I am sure Mr. Goodhart-Rendel will not mind if, in seconding this vote of thanks, I suggest that we might look upon this annual event as a kind of Commemoration Day, a commemoration of the benefactors of the profession whose names we have heard to-night in the titles. If it had not been for the Soanes and the Tites, the profession would have been the poorer, and I am certain that a great many fine works would have been lost to the country. Incidentally, I think the names of Soane and Tite are probably better known to us than they would have been if their fame had rested merely on their buildings. Perhaps this idea may lead to many more scholarships being founded than those which we have commemorated. May I suggest, too, that in thanking Mr. Goodhart-Rendel for his criticisms, we also remember the work which has been done in the last few weeks by the juries who have produced the Award for the Council. It is rather a thankless task, I daresay, and I am sure the competitors and students, and all members of the profession, would wish to thank the members of the Institute who devoted their time to the drawing up of the programmes and then assessing the work. We have had a criticism which has been a very broad and helpful one. Some people seem to think that criticism is only fault-finding; but Mr. Goodhart-



Rendel has shown that a fine criticism is also an appreciation; in fact, perhaps a better word would be a just assessment. I have very great pleasure in seconding the vote of thanks to Mr. Goodhart-Rendel for his criticism.

The PRESIDENT: I should like to add my thanks and congratulations to Mr. Goodhart-Rendel for the really charming address and criticism which he has given us to-night. I am sure we have all thoroughly enjoyed

it quite as much as have the students who have competed for these prizes. In one way, as an Institute, we feel a little bit disappointed that the result of the competitions is not quite so good as we had hoped; but Mr. Goodhart-Rendel has reassured us on that score by saying that it is only good material which is deferred for another year.

The vote of thanks was carried by acclamation.

Mr. GOODHART-RENDEL briefly replied.

## The Thirteenth Exhibition of the Arts and Crafts Exhibition Society at Burlington House

[BY A. R. POWYS [A].

This is not so large an exhibition as was held three years ago. The work still maintains a very high standard, and there are few things that it would not be a pleasure to possess and many that are very desirable. I do not write about the needlework, jewellery or pottery because they possess less architectural qualities and not because they are any less beautiful or well finished.

I imagine that there can be no disagreement that the two pieces of sculpture—the cart horses—by Mr. William G. Simmonds, are outstanding works of art. Their history is not uninteresting. Mr. Simmonds intended to use the wych elm for the large single mare, but when he started work he found a flaw within the wood and had to cut deeply to remove it. The remaining block suggested two rather than one animal. With this experience he cut the black mare from laminated mahogany, beautifully fitted together. Mr. Simmonds's drawings of the centre post French mill are valuable, particularly that which shows the works, for no more of these buildings are now made and, like ships and wagons, these structures have a long traditional history very well worth study.

The Snowy Owl, in Portland stone, by Mr. Herbert W. Palliser, is an exquisite work most subtly modelled. The pieces of furniture and the fittings for chandeliers and lamps, designed by the late W. A. S. Benson, are of considerable interest. They illustrate very well the change which has taken place in the last 40 or 45 years. Further, although some of these, because they show a way of thought different from our own, may be too easily ignored. One seems to learn from them that to design rather consciously in the fashion of a period is not to work for permanent beauty. Two candelabra by Mr. Benson are certainly outside any suggestion of this sort and still are, as they were then, fine works, skilfully made and graceful to see.

Of more directly architectural merit, Mr. George Jack's design for a chancel screen for St. Andrew's Church, Uxbridge, deserves close study, for it is of that kind which is not immediately appreciated. Mr. Jack spent many years in Philip Webb's office, and although his work is very individual we can recognise the influence of that master. In the Exhibition there is a silver teapot designed by Philip Webb and made by Mr. R. Catterson

Smith for Mr. Charles Winnill. This should be seen by those who admire Webb's work and there must be very few who do not.

As on other occasions there is a great quantity of beautiful furniture, and from this we can see that those who both design and make furniture are very much more favourably situated than those who get their designs carried out by others. Thus the table made for Sir Robert Lorrimer and the chair made for Mr. Herbert Baker both appear clumsy by comparison with other pieces in which the maker could vary the mouldings or the sizes of his wood as appeared desirable when the material was in his hands.

The pieces of furniture which I particularly noticed as very good were: Mr. Charles Spooner's room standard for electric light, Mr. Romney Green's cabinet of English walnut, Mr. Waal's bureau in English walnut made in his works for Mrs. C. Biddulph. This last piece is very closely in the Gimson tradition. Another notable work of the same school is the walnut "dresser" by S. Gordon Russell. Of the younger men who make furniture, and make and design it no less well than their predecessors, is Mr. Edward Barnsley. The bookcase of English walnut inlaid with ebony is the most important and perhaps the most beautiful of his pieces. It belongs to the same school of thought and represents a natural development of the Sapperton tradition. A chair in English walnut and a folding tea table in the same material are also excellent.

There is, however, one aspect which all the exhibits have in common: they can only be owned by the comfortably-off, for although relative to the work put into them they are cheap, when considered in relationship to life they are too costly for the average man. The exhibition is essentially one of hand-made things. Therefore the machine is nowhere in evidence; yet I should like to see some pieces at least in which a great part are the product of factories and in which the handicrafts are only used for the more highly-finished parts.

\*\*\* In the announcement of the Arts and Crafts Exhibition in the last JOURNAL (p. 151) the initials of the name of the late Mr. W. A. S. Benson were given as A. C. Benson.

# MAP TO INDICATE THE DISTRIBUTION OF THE SCHOOLS OF ARCHITECTURE

*recognised by the R.I.B.A. for the purpose of exemption  
from the Intermediate and Final Examination.*

## Key

*Schools recognised for  
exemption from the R.I.B.A.  
Intermediate Examination.*

*Schools recognised for  
exemption from the R.I.B.A.  
Final Examination (except  
Professional Practice.)*

## List of Schools

### ABERDEEN

- Robert Gordon's Colleges

### BIRMINGHAM

- The School of Architecture

### BRISTOL

- Royal West of England Academy

### CAMBRIDGE

- The University

### CARDIFF

- The Technical College

### EDINBURGH

- The School of Art

### GLASGOW

- The School of Architecture

### LEEDS

- The School of Art

### LIVERPOOL

- The University

### LONDON

- The Architectural Association
- The University
- The Northern Polytechnic

### MANCHESTER

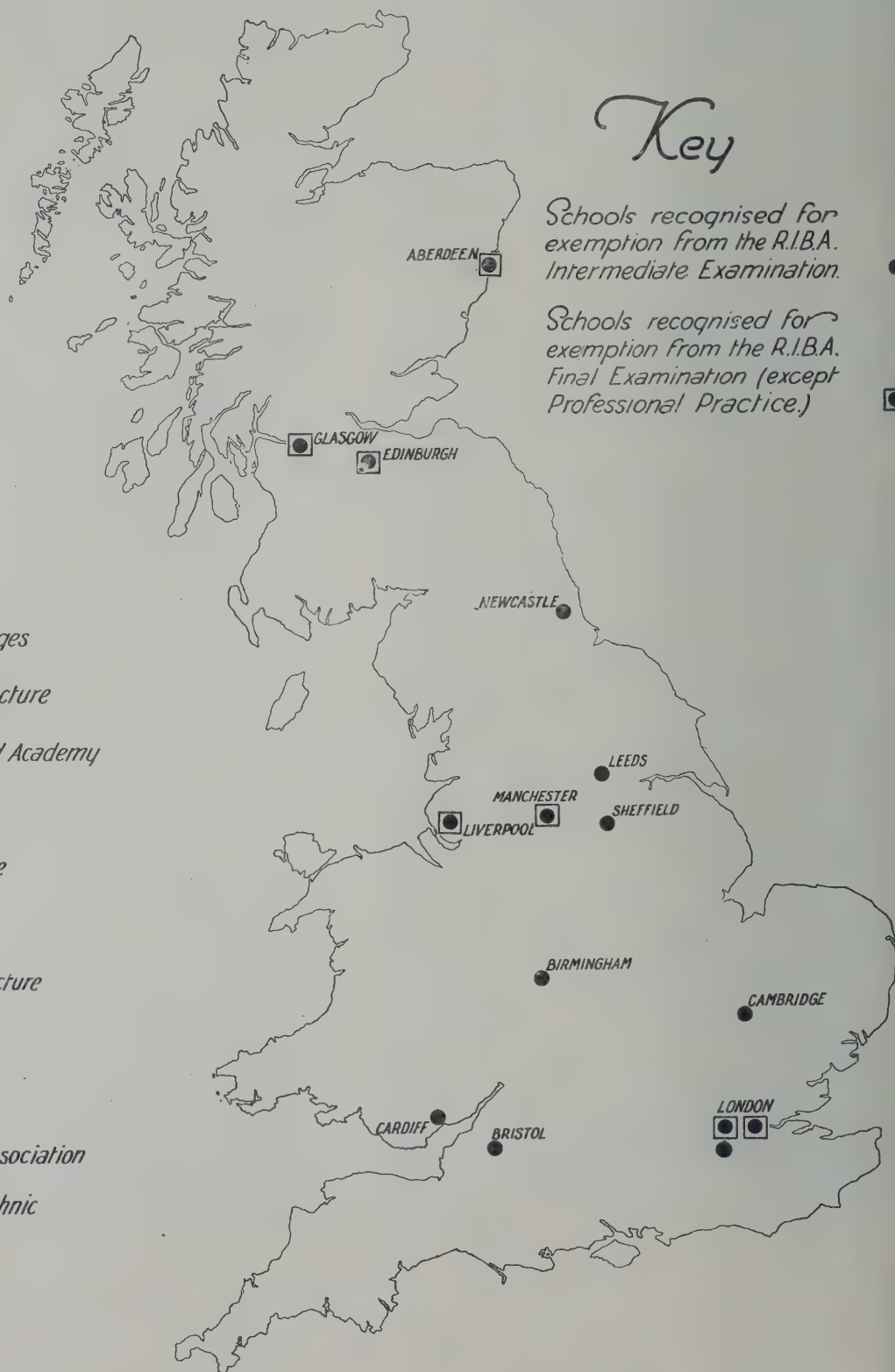
- The University

### NEWCASTLE

- Armstrong College

### SHEFFIELD

- The University





# Board of Architectural Education

FIRST MEETING OF THE RECONSTRUCTED BOARD, 18 JANUARY 1926.

THE OPENING ADDRESS OF THE CHAIRMAN (MR. MAURICE E. WEBB).

Mr. Webb said : As this is the first meeting of our reconstructed Board of Architectural Education, may I say a few words.

Hitherto this Board has been composed entirely of architects, but this meeting to-day is the outcome of an attempt by the Council of the R.I.B.A. to introduce the broadest possible principles into the education of those who are going to enter the profession.

So many questions of general education come before us in the course of our deliberations relating to the education of architects, draughtsmen, and others employed in the art of building, that we feel the need of the assistance of representatives of lay opinion to come to our Councils and help us.

We architects take a great interest in the training of our young men in a profession which we believe to be important to the community, and it is very pleasant to us to find that the great educational bodies throughout the country are prepared to co-operate with us in endeavouring to find the best way not only, we hope, of producing good architects, but also of creating some appreciation of what is good architecture and good building amongst the members of the public, for both are important to every one of us wherever we live.

The new Board is the result of this co-operation, and we thank H.M. Board of Education, the Universities, the London County Council, the Institute of Builders, the Headmasters' Conference, and others for sending of their best to give us of their experience in the problems confronting us.

For those who are new to us, and do not know the details of the organisation of this Board, it may be of some help to explain it very briefly.

Our work is divided into three branches: the managing for the R.I.B.A. of our examination system, the managing of our scholarships and prizes, and the helping and advising of schools of architecture.

In those three activities we have some influence in varying degrees throughout Great Britain and all our Dominions, but we are not in any way a teaching body.

To simplify the work of this large and comprehensive Board we have appointed three Committees:—

1. *The Schools Committee* : to keep in contact with all the schools teaching architecture and to help where help is needed.

In touch with this Committee is a Visiting Board of practising architects who visit and report on all schools seeking or receiving exemption from our

examination. The idea underlying this is that it is absurd to multiply examinations, and that where we are satisfied that school standards are as good as or higher than ours, we will not ask their students to sit again before admitting them to our part or whole membership.

2. *An Examinations Committee* : who deal with our own examinations.

In touch with them is a small Board of Moderators, also composed of practising architects, whose function is to keep a level standard in our examinations. At present, two architects join the Institute through our examinations for every one who enters by exemption from the schools.

3. *A Prizes and Scholarships Committee* : whose function is to set the subjects and judge the results through juries whom they appoint.

As a Board we shall receive at our meetings the reports of these three Committees for approval or otherwise, and, in addition, consider questions of general educational interest which will from time to time come up to us direct.

These three Committees have power to settle all questions of routine, and we hope, by this arrangement, that the time of this Board may be conserved for things that matter more than routine, and for consideration of reports to the Council of the R.I.B.A., who have the final word in matters of principle and finance.

We hope great things from your deliberations which may mark, I venture to think, a new development in professional education by directing the stimulating currents of lay thought into what have been described as the narrow channels of the professional mind.

## Correspondence

“THE CONDITION OF THE BUILDING INDUSTRY . . . AND INCREASED COST OF BUILDING WORK.”

39, Maddox Street,  
London, W.1.  
14 January 1926.

The Editor, JOURNAL, R.I.B.A.

DEAR SIR,—I have read with much interest the paper by Mr. Herbert A. Welch, also the discussion reported in your issue of the 9th inst. By a coincidence, upon the same day as the JOURNAL came into my hands, a book written by myself was published.\* A copy has

\* *Builders' Estimates and Pricing Data*. (Chapman and Hall, 9s. 6d.)

already been sent you, and if you refer to page 164 you will notice that there is a factor referred to which affects prices considerably, but which does not appear to have been mentioned by the employers' and operatives' representatives. It is possible that the paragraph may be of interest, so I repeat it here, viz. :

" 'Constants of Labour.' These are given in many technical books, but practical men seldom use them. . . . Of all the tables published the writer is of opinion that those contained in *Hurst's Architectural Surveyor's Handbook* are still the most consistent ; but it must be borne in mind that the original tables were prepared many years before the War, when the working day was much longer than at present. This fact has a greater effect upon 'Constants' than is apparent at first. The time lost at the commencement and at the completion of the day's work has to be distributed into a shorter length of time than formerly ; also the output of the men during the morning hours is not so great as when the men had a breakfast interval. In many cases, especially in large towns, the workmen have to travel some distance, under trying conditions, and obviously are not so fit to commence work as they would be if they could have their first daily meal upon the job. If arrangements could be made for an early start and a breakfast interval we probably would hear less about 'decreased output.' "

I must apologise for this letter, but as you have published the opinions of the architects, the employers, and the operatives, it occurred to me you might care to know the opinion of a quantity surveyor.—I am, dear Sir, yours faithfully,

HENRY A. MACKMIN.

21, Suffolk Street,  
Pall Mall East,  
London, S.W.1.  
13 January 1926.

The Editor, JOURNAL, R.I.B.A.,—

SIR,—The thanks of the community are undoubtedly due to Mr. Herbert A. Welch for his earnest attempt to diagnose and remedy the *malaise* in the building industry.

There is, however, a suggestion of unreality in the discussion following the reading of his excellent Paper, as reported in the JOURNAL, which augurs badly for a revival of the old co-operation of master and man in their mutual interests.

Shortage of "skilled labour" may be accepted for a brief period as a reason for not building with rapidity and niceness of finish, but it is none for not erecting such buildings as are needed.

Reluctance to embark upon a vocation in which energy and ability do not tend towards a greater reward, and in which personal initiative and reasonable freedom of action are stifled, is fortunately a characteristic of British manhood, and until unwise legislation, which has placed wage-earners under the tyranny of their trade unions, has been rescinded, self-respecting youths will continue to fight shy of such trades as are thus handicapped.—Yours faithfully, JAMES RANSOME [F.]

Abbey House, S.W.  
12 January 1926.

The Editor, JOURNAL R.I.B.A.,—

I venture to express the opinion that Mr. Welch's paper on this subject is one of the most valuable and most interesting that has been read at the Institute for many years. That it may soon have some practical result is a wish that must be in the minds of all our members.

My own small contribution to the discussion is that for

many years past I have introduced into my specifications words to the effect that the contractor is to provide sufficient tarpaulin or other protection to prevent the work from being stopped in wet weather. The value of this clause in our climate seems to be obvious.

R. LANGTON COLE [F.].

#### THE WEATHERING OF STONE.

56 Doughty Street, W.C.1.

10 January 1926.

The Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—At a meeting to consider the best stones to recommend for churchyard monuments, a statement was made by a monumental mason, and substantiated by three or four others, all of whom were men of considerable experience, who came from widely separated places in the south of England, which struck me as being so contrary to tradition, that I venture to report it.

He said that stones, which exude silicate, withstand the action of frost best, if they are thoroughly seasoned before they are masoned and erected as monuments.

By "seasoned" he meant that all the quarry-water should be dried out of the stone before it is worked, and that this was particularly necessary with Portland stone.

I protested that this was contrary to the experience of builders.

They at once said that when a stone was built into a wall with only one-sixth of its surface exposed, it was right to use stone as soon as possible after it was quarried ; but that in the case of stone being exposed to the weather on all sides, it would soon flake, if it were allowed to form the hard glassy surface, which is produced by quarry-water.

Yours faithfully,

LAURENCE A. TURNER,  
F.S.A., Hon. A.R.I.B.A.

#### R.I.B.A. FORMS OF CONTRACT.

6 Gray's Inn Place,  
Gray's Inn,  
London, W.C.1,  
18 January 1926.

The Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—I have read with interest the letter from Mr. Edmund Wimperis on page 144 of the JOURNAL, which points to a useful reform in the marking of the two documents in question. I do not think it would be necessary to print the whole of one document in red ; that is counsel of perfection, but it would be simple and more economical to print the "Note" in red in the articles of agreement at the top of page No. 1, instead of on the detachable slip.—Very truly yours,

W. E. WATSON [F.].

Prudential Chambers,  
Banbury.

15 January 1926

The Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—The letter published in the JOURNAL of the 9th inst., with regard to the R.I.B.A. forms of Contract, that a discrimination should be made, with or without Quantities, that one should be printed in red, I suggest that they remain as they are with a slip attached requesting that it would be advisable to read them before signing.—Yours faithfully,

F. J. COOKE [L.].

\*\* Owing to lack of space correspondence on other matters has unavoidably been held over this week.



## PARIS EXHIBITION AWARDS.

The following distinctions have been awarded to English exhibitors at the Paris Exhibition :

## HORS CONCOURS.

J. M. Easton [A.] and H. M. Robertson [F.]

## GRAND PRIX.

Dr. Anning Bell.  
Sir John Burnet, R.A. [F.]

## DIPLOMES D'HONNEUR.

Maxwell Ayrton [F].  
H. M. Baillie-Scott and Beresford.

## GOLD MEDALS.

Sir Reginald Blomfield, R.A. [F].  
Professor A. E. Richardson [F].  
Sir John Simpson [F.] and Maxwell Ayrton [F].  
Louis E. de Soissons [F].  
C. F. A. Voysey.

## SILVER MEDALS.

E. C. Frere [F].  
W. H. Brierley [F.] and J. H. Rutherford [L].  
Edward B. Maufe [F].  
Oswald P. Milne [F].  
Sir Giles Gilbert Scott, R.A. [F].

## BRONZE MEDALS.

Adams [F.] Holden [F.] and Pearson [F].  
R. Atkinson [F].  
Clough Williams-Ellis.  
T. S. Tait [A].

## Allied Societies

### MANCHESTER SOCIETY OF ARCHITECTS' ANNUAL DINNER.

The annual dinner of the Manchester Society of Architects was held on 16 December, Mr. Arthur Hope [F.], the President, occupying the chair. Among the members and guests present were :—

A. J. Hope, President, Manchester Society of Architects ; Rt. Hon. M. E. Mitchell, J.P., the Lord Mayor of Manchester ; E. Guy Dawber, F.S.A., President, Royal Institute of British Architects ; the Very Rev. Dr. Hewlett Johnson, D.D., Dean of Manchester ; Edward Fiddes, D.Litt., Senior Pro-Vice-Chancellor, Manchester University ; Isaac Taylor, Past President, Manchester Society of Architects ; Dr. Alfred Réé, President, Manchester Chamber of Commerce ; F. B. Dunkerley, Past President, Manchester Society of Architects ; J. Bradshaw Gass, Past President, Manchester Society of Architects ; Ald. H. Derwent Simpson, J.P., President, Manchester Law Society ; A. W. Hemmings, Past President, Manchester Society of Architects ; Francis Jones, Past President, Manchester Society of Architects ; W. A. Jones, Leeds and West Yorks Architectural Society ; W. M. Reekie, O.B.E., Chairman, Council Royal Manchester Institution ; Samuel

Taylor, President, Burnley Society of Architects ; Prof. A. C. Dickie, M.A., F.S.A. ; H. L. Paterson, President, Sheffield, South Yorks and District Society ; J. Henry Price ; H. C. Fairhurst, Senior Vice-President, Manchester Society of Architects ; Ian MacAlister, M.A., Secretary, Royal Institute of British Architects ; John Swarbrick, Hon. Secretary, Manchester Society of Architects ; G. Sanville, Assistant Hon. Secretary, Manchester Society of Architects ; J. Theo. Halliday, Junior Vice-President, Manchester Society of Architects.

The President proposed the toast of the Royal Institute of British Architects.

Mr. E. Guy Dawber, P.R.I.B.A., in replying, appealed to members of his profession to aid the movement to preserve the amenities and old-world charm of our towns and villages.

Since the war, he said, many of the changes that had taken place were lamentable. Many villages seemed to be copying the worst features of our large towns. It was terrible to see the charm of our villages spoiled by ugly motor garages, with great blank sheets of glass, and their trade signs and symbols. The motor-car, of course, was responsible for this, but really the motor-car seemed to be the Moloch to which we were sacrificing the charm of our old towns and villages—a charm which was typically English.

Again, the whole countryside was being littered with architectural horrors in the shape of small houses built of inferior materials. They did not want State control, but it seemed to him that the time had come when some authority should be constituted in each district to prevent that kind of thing happening. It was largely due to work being put into the hands of ill-trained architects and of local officials who had not had the proper training and who had no local sympathies. Yet, with a little care and judgment, and with some civic body to act as a guide, the thing could be done well and with no more expense.

The Lord Mayor of Manchester (The Right Hon. Miles E. Mitchell), in replying to the toast of "The City of Manchester," proposed by Mr. H. S. Fairhurst [F.], said large buildings, eight, nine, and ten storeys high, were going up in the centre of the city, thus causing a greater congestion of people in the central area, and adding difficulty to the Tramway Committee's problem. If this tendency, for which architects were partly responsible, were to increase, the Corporation would have to face the question of widening the streets to accommodate the growing traffic.

The City Surveyor's department had been authorised to prepare a kind of civic plan of the centre of the city in order that the Corporation should know what was happening and where present-day tendencies were leading. If the architects of Manchester would give special consideration to the town-planning side of their work he was sure they could help the administration of the city very greatly.

The Chairman (Mr. Arthur Hope), said he regarded it as a most hopeful sign that the press was now taking much greater interest in architecture.

"Our Guests" was proposed by Mr. Francis Jones [F.], and replied to by Dr. Alfred Réé, President of the Manchester Chamber of Commerce.

## R.I.B.A. Prizes and Studentships, 1926

## Deed of Award

The designs and drawings submitted for the Prizes and Studentships in the gift of the Royal Institute are now on exhibition in the R.I.B.A. Galleries, 9 Conduit Street, and will remain open to members and the public until 1 February (10 a.m. till 8 p.m., Saturdays 5 p.m.). The Council's Deed of Award, read at the General Meeting of 18 January, gives the results as follows:—

## THE ROYAL INSTITUTE SILVER MEDALS

1. *The Essay Medal and Fifty Pounds.*

Three essays were received under the mottoes:—

1. "Vinci."
2. "L'Inconnu."
3. "Gai."

The Council regret that they are unable to award the prize.

2. *The Measured Drawings Medal and Seventy-five Pounds.*

Three sets of drawings were sent in of the several buildings enumerated under mottoes as follows:—

1. "Nero": six strainers and loose sketches (The Orangery; St. Lawrence Jewry; 34, Great Tower Street, E.C., etc.).
2. "Ilex": three strainers and loose sketches (miscellaneous drawings in Verona, Rome, etc.).
3. "Resurgam": five drawings and loose sketches (Southwark Cathedral, and Screen at Walpole St. Peter, Norfolk).

The Council regret that they are unable to award the prize.

## THE TRAVELLING STUDENTSHIPS.

1. *The Tate Prize and Fifty Pounds.*

Twelve<sup>1</sup> designs for a Memorial to a National Hero were submitted under the following mottoes:—

	Sheets.
1. "Cotter" .. .. .	6
2. "Omega" .. .. .	4
3. "Rizz" .. .. .	6
4. "Avanti" .. .. .	4
5. "Kuklos" .. .. .	4
6. "Bonzo" .. .. .	5
7. "Moss" .. .. .	5
8. "Scale" .. .. .	4
9. "Ulysses" .. .. .	5
10. "Hatikuch" .. .. .	6
11. "Amber" .. .. .	5
12. "Koko" .. .. .	2

The Council have awarded the Certificate and, subject to the specified conditions, the sum of Fifty Pounds to the author of the design submitted under the motto "Bonzo\*"; and have granted exemption from submitting Testimonies of Study for the R.I.B.A. Final

\*Mr. A. Calvaley Cotton, 50 Shrewsbury Road, Oxtou, Birkenhead, Cheshire.

Examination to the authors of the designs submitted under the mottoes "Avanti,"\* "Koko"† and "Cotter"‡.

2. *The Soane Medallion and One Hundred and Fifty Pounds.*

Nine designs for a Head Office of an English Bank were submitted under the following mottoes:—

	Sheets.
1. "Lombard" .. .. .	4
2. "Finance" .. .. .	5
3. "Lexis" .. .. .	5
4. "Pardi" .. .. .	4
5. "Vitrification" .. .. .	4
6. "Euxine" .. .. .	5
7. "Dorvel" .. .. .	5
8. "Blisco" .. .. .	5
9. "Varet" .. .. .	5

The Council regret that they are unable to award the Soane Medallion. They have granted exemption from submitting Testimonies of Study for the R.I.B.A. Final Examination to the authors of the designs submitted under the mottoes:—

"Finance."§  
 "Vitrification."\*\*\*  
 "Dorvel."††  
 "Varet."§§

3. *The Owen Jones Studentship and One Hundred Pounds.*

One application was received for the Owen Jones Studentship under the following motto:—

"Michael" .. .. . Strainers 8

The Council have awarded the Certificate and, subject to the specified conditions, the sum of One Hundred Pounds to the author of the drawings submitted under the motto "Michael."\*\*\*

4. *The R.I.B.A. (Alfred Bossom) Studentship: Gold Medal and Two Hundred and Fifty Pounds.*

The Council have awarded Silver Medals to the authors of designs accompanied by reports for a Scheme for Housing Trust undertaking to rehouse 320 persons submitted under the following mottoes:—

1. "Chota"††† .. .. . Sheets 2
2. "Hat"§§§ .. .. . 3

The Council have awarded the Gold Medal and

\* Mr. Frank Chippindale, 10 Ash Grove, Otley, Yorks.

† Miss Leonara F. M. Payne, 28 Horbury Crescent, W.L.

‡ Mr. T. Murray Ashford, 30 Fountain Road, Edgbaston, Birmingham.

§ Mr. Leslie R. Hiscock [A], 133 High Street, Guildford, Surrey.

\*\* Miss Alison Sleight, 16 Gordon Square, W.C.1.

†† Mr. Geoffrey R. Barnsley [A], 3 Paper Buildings, Temple, E.C.4.

§§ Mr. H. Thearle [A], 42 Wyresdale Road, Aintree, Liverpool.

\*\*\* Mr. E. Dinkel, 14 Kelso Place, Kensington, W.8.

††† Mr. E. H. Ashburner, c/o Mrs. Learner, 42 King Henry's Road, Primrose Hill, N.W.3.

§§§ Miss Doris Lewis, [A] 41B Belsize Park, Hampstead, N.W.3.



subject to the specified conditions, the sum of Two Hundred and Fifty Pounds to the author of the design and report submitted under the motto "Hat."\*

THE GRISSELL GOLD MEDAL AND FIFTY POUNDS.

One design for a Swimming Bath was submitted under the following motto :—

"Exit": four strainers and book of calculations.

The Council have awarded the Medal and Fifty Pounds to the author of the design submitted under the motto "Exit."†

THE HENRY SAXON SNELL PRIZE. £60.

Two designs for an Out-Patients' Department were submitted under the following mottoes :—

"Ubique"	..	..	..	..	2
"Germ"	..	..	..	..	3

The Council regret that they are unable to award the prize. A prize of Fifteen Pounds has been awarded to the author of the design submitted under the motto "Germ."§

THE ASHPITEL PRIZE, 1925.

The Council have, on the recommendation of the Board of Architectural Education, awarded the Ashpitel Prize (which is a prize of books, value £10, awarded to the candidate who has most highly distinguished himself among the candidates in the Final Examinations of the year) to Mr. Christopher Green, B.A., Oxon, of 5, Pickering Place, W., Probationer, 1925; Student, 1925; and who passed the Final Examination, December, 1925.

THE R.I.B.A. SILVER MEDAL FOR RECOGNISED SCHOOLS.

The Council have awarded the Silver Medal for the best set of drawings submitted at the Annual Exhibition by Post-graduate Students of Recognised Schools exempted from the Final Examination to Miss Thelma Silcock, of the Liverpool University School of Architecture.

THE TRAVELLING STUDENTS' WORK.

*The Tite Prizeman*, 1923.—The Council have approved the report of Mr. J. C. Shepherd [A.], who travelled in Italy.

*Owen Jones Student*, 1925.—The Council have approved the work of Miss L. F. M. Payne, who travelled in England and Italy.

*Pugin Student*, 1925.—The Council have approved the work of Mr. D. H. McMorran, who travelled in Durham, Northumberland and Yorkshire.

*The R.I.B.A. (Alfred Bosson) Travelling Student*, 1925.—The Council have approved the report submitted by Mr. F. E. Bennett [A.], who travelled in America.

A.B.S. SCHEME OF INSURANCE.

The A.B.S. specialises in Life Assurance. In Whole Life Assurance the sum assured and bonus are payable at death and the payment of premiums normally continues throughout life. The bonuses which are usually payable with the sum assured may be surrendered for

\* Miss Doris Lewis [A.], 41B Belsize Park, Hampstead, N.W.3.

† Mr. John Wm. Wood, c/o The Architectural Association, 4 Bedford Square, W.C.1.

§ Mr. Arthur E. Cameron [A.], 18 Eastwood Road, South Woodford, E.18.

cash, applied to the reduction of future premiums or used to reduce the period over which premiums are payable. The Society is not tied to any insurance office and is prepared to offer and advise upon a wide choice of policies in leading companies. Half the initial commission is returned to the assured in the form of rebate and the other half forms a direct contribution to the Society's funds.

Please address all enquiries to the Secretary, Architects' Benevolent Society, 9 Conduit Street, W.1. Telephone: Mayfair 434.

NATIONAL HEALTH INSURANCE.

*The Architects' and Surveyors' Approved Society.*  
26 Buckingham Gate, London, S.W.1.

CONTRIBUTIONS.

The contribution for men is 10d. per week, and for women 9d. per week, 5d. of which is in each case payable by the employer.

ORDINARY BENEFITS.

**SICKNESS BENEFIT.**—Men, after 26 contributions have been paid, 9s. weekly; after 104 contributions have been paid, 15s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly; after 104 contributions have been paid, 12s. weekly.

**DISABLEMENT BENEFIT.**—Men and women, 7s. 6d. per week, after 104 contributions have been paid.

**MATERNITY BENEFIT.**—40s. after 42 contributions have been paid.

ADDITIONAL BENEFITS.

**SICKNESS BENEFIT.**—Payable at the increased rates of 22s. per week for men, and 19s. for women.

**DISABLEMENT BENEFIT.**—Increased to 11s. per week for both men and women.

**MATERNITY BENEFIT.**—Increased to 54s.

**SPECIAL BENEFITS.**—Grants made to members entitled to "additional benefits" amounting to the full cost of any optical, dental, hospital or convalescent treatment, also for glasses, surgical appliances, artificial teeth, etc. Members may choose their own institutions, nursing homes or practitioners.

Further particulars and forms of application for membership may be obtained from the undersigned.

HERBERT M. ADAMSON,  
Secretary.

FINAL EXAMINATIONS.

ALTERNATIVE PROBLEMS IN DESIGN.

*Instructions to Candidates.*

1. The drawings, which should preferably be on uniform sheets of paper of not less than Imperial size, must be sent to the Secretary of the Board of Architectural Education, Royal Institute of British Architects, 9 Conduit Street, W., on or before the dates specified below.

2. Each set of drawings must be signed by the author, AND HIS FULL NAME AND ADDRESS, and the name of the school, if any, in which the drawings have been prepared, must be attached thereto.

3. All designs, whether done in a school or not, must be accompanied by a declaration from the student that the design is his own work and that the drawings have been wholly executed by him. In the preparation of the design the student may profit by advice.

4. Drawings for subjects (a) are to have the shadows projected at an angle of 45° in line, monochrome, or colour. Drawings in subjects (b) are to be finished as working drawings. Lettering on all drawings must be of a clear, scholarly, and unaffected character.

## LXXXV

(a) A design for an *Auction Room and Auctioneer's Offices*, to be situated on the ground floor of a block of office buildings occupying a site 150 feet deep with a frontage to a main street of 80 feet. The front part of the building, to depth of 40 feet, will be carried up an additional five storeys and a separate entrance and staircase must be provided to the offices on the upper floors. A back street gives access to the rear of the site, and this frontage may be carried up an additional three storeys to a depth of 30 feet.

The Auction Room is for the sale of furniture, books and objets d'art which are displayed prior to sale.

The accommodation should consist of:—

- Entrance Hall,
- Clerks' Office and general information outer office with counter and space for the display of posters, etc.
- Large Auction Room with Auctioneer's private room adjoining, and Basement storage rooms beneath.
- Staircase and goods lift to basement and staircase to gallery, if any, of Auction Room.

*Drawings required:—*

Ground floor plan to  $\frac{1}{8}$ -inch scale.

Basement storage plan to  $\frac{1}{8}$ -inch scale.

At least two sections through Auction Room, one of which is to be taken through the Entrance Hall, to  $\frac{1}{8}$ -inch scale.

(b) Working drawings for Subject No. LXXXIII(a), *A Private Chapel*.

The design for a Private Chapel may, after it has been approved, be re-submitted with the addition of:—

$\frac{1}{2}$ -inch detail of the whole of the west front and a portion of the connecting colonnade. The drawings to show the vertical section through the wall and plans of the openings at various levels.

## LXXXVI

(a) A design for a *Shop Front*. The shop front is to be in an important street and suitable for a firm of high class jewellers.

The frontage is 24 feet between centres of 18-inch party walls.

The building over will consist of offices 5 storeys high, one to be in the roof. Access to these offices need not be provided as part of the scheme.

*Drawings required:—*

$\frac{1}{8}$ -inch scale elevation showing front of building.

$\frac{1}{2}$ -inch plan, section and elevation of the Shop Front.

Detail of portion of ornament to  $\frac{1}{8}$ th full size.

(b) Working drawings for Subject No. LXXXIV(a), *A Garage*.

The design for a Garage may, after it has been approved, be re-submitted with the addition of:—

Complete  $\frac{1}{8}$ -inch scale working drawings showing all necessary details, including drainage, of the portion of the Garage containing the chauffeurs' flats.

$\frac{1}{2}$ -inch detail of the same portion.

## LXXXVII

(a) A design for a *Grand Staircase of a City Hall*. The staircase is reached from a spacious Entrance Hall and leads to a suite of Reception Rooms which run along the front of the building over the entrance.

The first floor is 20 feet above the ground floor, which is itself 4 feet above the pavement level of the street.

The design is to show the Entrance Hall and the Staircase together with the Ante-room and principal Reception Room at the top of the Staircase.

No dimensions are prescribed for the space available for the staircase. It is to be appropriate to the dignity of a large City Hall of an important city.

*Drawings required:—*

$\frac{1}{16}$ -inch plan of ground floor to show Entrance Hall and Staircase.

$\frac{1}{16}$ -inch plan of first floor to show Ante-room, and part of reception suite.

$\frac{1}{2}$ -inch scale section on main axis.

(b) Working drawings for subject No. LXXXV(a), *An Auction Room and Auctioneer's Office*.

The design for an Auction Room and Auctioneer's Office may, after it has been approved, be re-submitted with the addition of:—

Two complete  $\frac{1}{2}$ -inch scale sections through the Auction Room, sufficient to show construction and materials.

## LXXXVIII

(a) A design for a *Suburban Electric Railway Station*. The station will be built parallel to a main road, from which it is set back 50 feet. There are two lines in a cutting 14 feet below the level of the roadway.

Entrance and Booking Hall of not less than 2,000 feet super. containing island booking offices and six small shops or kiosks. A left luggage office and cloak-room, small office for travelling superintendent, mess room for porters and booking clerks with kitchen, store, signalling room and lavatory accommodation for men and women.

This accommodation will be on the up side, the down side having a covered platform only, to which access is gained by a bridge and staircase. Ample provision should be made for advertising, and this should be considered in conjunction with the scheme of decoration. Attention should also be paid to the following essential conditions:—

Centralization of control.

Despatch in dealing with large crowds.

Cleanliness and durability of materials.

*Drawings required:—*

$\frac{1}{8}$ -inch scale plan, cross section and front elevation.

$\frac{1}{2}$ -inch detail of a portion of main front.

(b) Working drawings for Subject No. LXXXVI(a), *A Shop Front*.

The design for a Shop Front may, after it has been approved, be re-submitted with the addition of complete  $\frac{1}{2}$ -inch details of the elevation, section and plan of Shop Front, to include also bulkhead construction and vaults under pavement, and one bay of reinforced concrete flooring to shop.

## LXXXIX

(a) *A Small Housing Scheme*. In a Suffolk village of about 1,000 inhabitants there is need for 30 new cottages; half are for agricultural labourers, the other half for village artisans and labourers. The cottages are to be erected under a housing scheme with the aid of a subsidy under the 1924 Housing Act.

The village street runs East and West and is fairly level. On the north side of this street at the Western end of the village is a rectangular field sloping upward from the road at a grade of about 1 in 15. There is a frontage of about 450 feet to the road which is straight. The field contains 8 acres, the whole of which is available for the houses, gardens, etc. The North side of the field is bounded by a wood and common, to which access from the main road must be given for pedestrians and for occasional use by carts. On the South side of the road, on the central axis of the field, is the entrance to a large country house and park.

*Drawings required:—*

A lay-out plan of the whole to the scale of  $\frac{1}{16}$ .

Detail lay-out plan and plans of the houses fronting the main road with elevation of the whole of that frontage to a scale of 16 feet to 1 inch.

Complete plans, sections and elevations of one of the blocks of cottages to a scale of 8 feet to 1 inch.

All the dwellings to be of such sizes, accommodation and economical design that they may be eligible for the Government subsidy.

Two small village shops must be incorporated in the scheme.

(b) Working drawings for Subject No. LXXXVII, *A Grand Staircase of a City Hall*.



The design for a Grand Staircase of a City Hall may, after it has been approved, be re-submitted with the addition of :—  
 $\frac{1}{2}$ -inch scale details of section and part plan sufficient to show materials and construction.

XC

(a) A design for a *Concert Hall*. The Concert Hall is to be erected in an inland "Spa" such as Bath or Buxton, a town which would have sufficient visitors to justify the provision of an attractive site for the building.

The site is rectangular in shape with a frontage of 250 feet to a main road running East and West, and 300 feet to a side road running North and South.

The South side overlooks a valley and river.

The site is level for 200 feet, then falls steeply to the valley.

The portion not covered by the building is to be laid out as lawns, gardens, etc.

*Accommodation required :—*

Concert Hall to seat 750 persons.

Space for an orchestra of 80 performers.

A small organ.

A Green Room for Artists.

Dressing Rooms for musicians and soloists of both sexes.

Lavatories for both sexes (artists).

Large entrance hall with Box or Ticket Office.

Cloak rooms, lavatories for both sexes.

A Refreshment room to seat 250 persons, with kitchen accommodation and the necessary services.

*Drawings required :—*

To 1/16 scale, plans, 2 elevations and 1 section.

*Note.*—Students are to pay special attention to acoustics and to avoid circular or elliptical plans for the Concert Hall.

(b) Working drawings for Subject No. LXXXVIII, *A Suburban Electric Railway Station*.

The design for the Railway Station may, after it has been approved, be re-submitted with the addition of complete  $\frac{1}{2}$ -inch details of booking hall including plan.

*Dates for Submission of Designs in 1926.*

Subject LXXXV	27 Feb.	Subject LXXXVIII	31 Aug.
" LXXXVI	30 Apr.	" LXXXIX	30 Oct.
" LXXXVII	30 June	" XC	31 Dec.

## REGISTRATION AS PROBATIONER, R.I.B.A.

Special attention is called to the fact that, except in very special cases, a Headmaster's Certificate will not be accepted after 1 October 1927, and no one will be registered as a Probationer of the R.I.B.A. unless that person has passed one of the recognised examinations in the required subjects.

A list of the examinations recognised may be obtained free at the R.I.B.A.

## R.I.B.A. (ANDERSON AND WEBB) SCHOLARSHIP AT THE SCHOOL OF ARCHITECTURE, UNIVERSITY OF CAMBRIDGE.

The R.I.B.A. (Anderson and Webb) Scholarship, £70 year, will be tenable for three years from October, 1926. Full particulars may be obtained from E. Bullough, Esq., Gonville and Caius College, Cambridge, on application before the 1st February 1926.

# Notices

## THE SEVENTH GENERAL MEETING.

The Seventh General Meeting (Ordinary) of the Session 1925-26 will be held on Monday, 1 February 1926, at 7.30 p.m., for the following purposes :—

To read the Minutes of the General Meeting (Ordinary) held on 18 January 1926 ; formally to admit members attending for the first time since their election or transfer.

The President, Mr. E. Guy Dawber, F.S.A., to deliver his address to students and to present the Prizes and Studentships awarded by the Council for 1926.

## R.I.B.A. PAMPHLET ON "THE ARCHITECT AND HIS WORK."

The attention of members is specially called to the pamphlet on "The Architect and His Work," enclosed with this copy of the JOURNAL.

The pamphlet was compiled by the Practice Standing Committee with the assistance of the late Mr. Paul Waterhouse, Past President, and has been issued by the Council with a view to bringing before the general public the functions of an architect and his use to the community.

Members can obtain further copies of the pamphlet for circulation to their friends, on application to the undersigned, at a cost of 2s. 6d. per dozen.

## ELECTION OF MEMBERS, 7 JUNE 1926.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that if they wish to take advantage of the election to take place on 7 June 1926, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than 1 April 1926.

## LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

## R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28, Bedford Square, London, W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the Committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.

## ELECTION OF MEMBERS.

15 FEBRUARY, 1926.

An election of members will take place at the Business General Meeting on 15 February 1926. The names and addresses of the Candidates (with the names of their proposers), found by the Council to be eligible and qualified for membership according to the Charter and Byelaws and recommended by them for election, are as follows :—

## AS FELLOWS (20).

ALLCOCK : EDWARD THOMAS [A. 1896], 12, Baxter Gate, Loughborough ; Ashfield, Ashby Road, Loughborough. Proposed by Arthur H. Hind, J. Stockdale Harrison, Clement Stretton.

FREAD : HORACE CHARLES [A. 1905], Portsmouth Road, Esher ; Millmead, Lower Green, Esher. Proposed by A. Jessop Hardwick, James Ransome, Henry A. Crouch.

GOLD : HUGH ANDREW, M.C. [A. 1913], 14, Bedford Row, W.C.1 ; 31, Christchurch Road, Streatham Hill, S.W.2. Proposed by Owen C. Little, J. E. Dixon-Spain, Robert Lowry.

GOLDSMITH: MAJOR GEORGE HARTLEY, M.C. [A. 1907], Headquarters, Imperial War Graves Commission, St. Omer, France; "Odstone," Rhos-on-Sea, North Wales. Proposed by Paul Ogden, Sir Edwin L. Lutyens, R.A., Albert J. Thomas.

HAMPSON: JOSEPH LOUIS [A. 1910], 10, Richmond Terrace, Blackburn; 360, St. Helens Road, Bolton. Proposed by Harry Vernon Wolstenholme, John Bradshaw Gass, Arthur J. Hope.

HUGHES: THOMAS HAROLD, A.R.C.A. (Arch. London), F.S.I., F.R.G.S., [A. 1911], 157, Renfrew Street, Glasgow; 27, Ashton Road, Glasgow. Proposed by Geo. And. Paterson, Sir John J. Burnet, A. Marshall Mackenzie.

NEWMAN: ERIC GEORGE [A. 1910], State Buildings Department, Ministry of Public Works, Cairo; 1, Sharia el Walda, Kasr el Doubara, Cairo, Egypt. Proposed by George Drysdale and the Council.

ROBERTSON: ALEXANDER ROBERT [A. 1902], 91, Brick Lane, E.1; "Nutbourne," Leigh Cliff Road, Leigh-on-Sea, Essex. Proposed by R. H. J. Mayhew, W. R. Davidge, W. Gillbee Scott.

SCOTT: ERIC WILFRID BONING [A. 1912], 24, Castle Meadow, Norwich; Hill Cottage, Harvey Lane, Thorpe St. Andrew, Norwich. Proposed by Edw. T. Boardman, E. Guy Dawber, George J. Skipper.

SCOTT: THEODORE GILBERT, M.C. [A. 1914], 24, Castle Meadow, Norwich; Littlewood, Harvey Lane, Thorpe St. Andrew, Norwich. Proposed by Edw. T. Boardman, E. Guy Dawber, Mervyn E. Macartney.

TAIT: THOMAS SMITH [A. 1913], 1, Montague Place, Bedford Square, W.C.; 48, Rotherwick Road, Golders Green, N.W.11. Proposed by Sir John J. Burnet, E. Stanley Hall, Robert Atkinson.

TAYLOR: SAMUEL POINTON [A. 1908], Ministry of Health, Whitehall, S.W.; 62, Roxeth Hill, Harrow-on-the-Hill. Proposed by Dr. Raymond Unwin, E. C. P. Monson, Louis de Soissons.

TETLEY: CHARLES REGINALD [A. 1913], 240, Beaver Hall Hill, Montreal; 4291, Montrose Avenue, Westmount, P.Q., Canada. Proposed by Philip J. Turner, Geo. A. Ross, Kenneth G. Rea.

WESTWOOD: PERCY JAMES [A. 1904], 7 and 8, Adam Street, Adelphi, W.C.2; "Nutfield," Weybridge, Surrey. Proposed by Sir Banister Fletcher, J. W. Stanley Burnester, Osborn C. Hills.

*And the following Licentiate, who are qualified under Section, IV, Clause C (ii), of the Supplemental Charter of 1925:—*

ANDERSON: ARTHUR ERNEST, 3,299, St. Adele Avenue, Montreal, P.Q., Canada. Proposed by Kenneth G. Rea, Percy E. Nobbs, Geo. A. Ross.

FINLAYSON: WILLIAM, Strathearn Lodge, Crieff, Perthshire. Proposed by the Council.

PRITCHETT: HERBERT DEWES, 12, High Row, Darlington; 9, Elton Parade, Darlington. Proposed by W. J. Moscrop, Percy Robinson, H. S. Chorley.

*And the following Licentiate who have passed the qualifying examination:—*

CLELAND: JOHN STOCKWIN, M.B.E., Chief Government Architect, Union of South Africa, Public Works Department, Union Buildings, Pretoria, South Africa. Proposed by J. Lockwood Hall, Franklin K. Kendall, Albert J. Thompson.

SUDBURY: HARRY TATHAM, Rutland Chambers, Ilkeston; Wayside, Longfield Lane, Ilkeston. Proposed by George H. Widdows, T. H. Thorpe, A. Ernest Heazell.

THRAVES: ALFRED JOHN, 12, Victoria Street, Nottingham; "Wolds Cot," Plumtree, Notts. Proposed by F. W. C. Gregory, A. Ernest Heazell, A. Nelson Bromley.

#### AS ASSOCIATES (6).

ALI: S. AZIZ [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], New Lane, Hyderabad, Deccan, India. Proposed by Howard Robertson, Robert Atkinson, W. E. Vernon Crompton.

ALSOP: GEORGE HATHERLEY [Final], 29, Thornton Street, Kew, Melbourne, Australia. Proposed by Rodney H. Alsop, Frank T. Verity, C. E. Varndell.

BARNES: THOMAS SCOTT [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Morden Lodge, Morden, Surrey. Proposed by J. Alan Slater, Major Harry Barnes, W. R. Davidge.

BHUTA: GOPALJI MULJI [Final], c/o Messrs. Gregson, Batley and King, Chartered Bank Building, Fort, Bombay India. Proposed by C. E. Varndell, Arthur Stratton and the Council.

MEIKLE: EDYTH [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 27, Parliament Hill, Hampstead, N.W.3. Proposed by Howard Robertson, Robert Atkinson, Geoffrey Lucas.

SILCOCK: FRANCES THELMA [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], The Cross, Huyton, Liverpool. Proposed by Professor C. H. Reilly and the Council.

#### AS HON. FELLOW (1).

DICKSEE: SIR FRANK, P.R.A., 3, Greville Place, N.W.6. Proposed by the Council.

#### AS HON. ASSOCIATE (1).

GRIGGS: FREDERICK LANDSEER MAUR, A.R.A., Campden Gloucestershire. Proposed by the Council.

#### 29 MARCH 1926

The following applications for election have been received. Notice of any objection or other communication respecting the candidates must be sent to the Secretary for submission to the Council prior to Monday, 15 February 1926.

#### AS FELLOWS (10)

LIVOCK: STANLEY GAGE [A. 1910], 22 Surrey Street, Strand W.C.2, and at Norwich; Meadway, Horsell Rise, Woking.

MILBURN: STANLEY WAYMAN, M.C. [A. 1913], 19 Fawcett Street, Sunderland; 4 Ashmore Terrace, Sunderland.

MILBURN: WILLIAM, JUNR., B.Sc., F.S.I., [A. 1910], 19 Fawcett Street, Sunderland; 23 Valebrooke Avenue, Sunderland.

MOORE: MAJOR FREDERICK WILLIAM, D.S.O., M.C. [A. 1912] Queensgate Chambers, Bradford, and Station Buildings, Keighley; Hillside, Riddlesden, Keighley.

PHILLIPS: REES [A. 1913], 9 Bentinck Street, Manchester Square, W.1; 84 Hamilton Terrace, N.W.8.

*And the following Licentiate, who are qualified under Section IV, Clause C (ii) of the Supplemental Charter of 1925:—*

BECKWITH: HENRY LANGTON, F.S.I., 3 Cook Street, Liverpool; Sandown Park, Wavertree, Liverpool.

CHADWICK: MAJOR JOHN, T.D., Bletchley, Bucks.

FAUNCH: FREDERICK GEORGE, 76 Cranbrook Road, Ilford Essex.

WADDINGTON: FREDERIC TURNER, 52 Abingdon Street, Blackpool; 127 Hornby Road, Blackpool.

WALSH: JOSEPH FREDERICK, F.S.I., 10 Harrison Road, Halifax Savile Green, Halifax.



## AS ASSOCIATES (33)

- BLIZZARD : HENRY GEORGE [Special], 8 Elmwood, Welwyn Garden City, Herts.
- BROOKFIELD : GEORGE PIERS, B.Litt.Oxon., B.Sc. (in Architecture), of the Massachusetts Institute of Technology [Exempted from Final Examination], 19 Rue de Lille, Paris, France.
- BURTON : JOHN [Special], 71, West Parade, Mount Pleasant, Stoke-on-Trent.
- CASTELLINO : SYLVESTER JOSEPH TRINITY D'SOUZA [Special], c/o Messrs. J. A. Castellino & Co., 328 Sachapeer Street, Poona, India.
- COOMBS : ROBERT EDWIN MONTAGU [Final], Cathedral School, Llandaff, Cardiff.
- COOPER : WILLIAM REGINALD ROYDON [Special], 17 New Street, Shrewsbury.
- CURRIE : MURDOCH [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 250 Paisley Road W., Glasgow.
- DANN : CLIFFORD HORACE [Final], 66 Trinity Street, Norwich.
- DOYLE : STANLEY HODGSON [Special], Calverley Chambers, Victoria Square, Leeds.
- GRAY : CHARLES CLARE [Final], 81 Sutton Crescent, Walsall.
- GREEN : CHRISTOPHER, B.A.Oxon. [Final], 83 Gunterstone Road, Baron's Court, W.14.
- GREEN : RALSTON TILSLEY [Final], 11 Dents Road, Wandsworth Common, S.W.11.
- HARLEY : THOMAS [Final], 15 Dewar Street, Dunfermline.
- KEMP : CECIL GEORGE [Special], Bridge Road, Welwyn Garden City, Herts.
- KIMBER : CHARLES FRANK, M.C. [Special], 39 Head Street, Colchester.
- LIPSON : SAMUEL [Final], c/o James Miller, Esq., A.R.S.A., 15 Blythwood Square, Glasgow.
- McKEWAN : ARTHUR MALCOLM [Final], 27 Somerset Road, Handsworth Wood, Birmingham.
- MESSENT : CLAUDE JOHN WILSON [Final], 34 Mile End Road, Norwich.
- MOORE : JOHN ROBERT [Special], 13 Acland Road, Willesden Green, N.W.2.
- PALMER : PHILIP EVANS [Special], 25 Royal Avenue, Chelsea, S.W.3.
- PARAMOR : FRANK WILLIAM [Final], "Hillsborough," Selsdon Village, Sanderstead, Surrey.
- PASHEN : JOHN HERBERT [Special], "Ujji," Dorchester Road, Weymouth.
- PATKER : PURUSHOTTAM MUKUND [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Harvey Road, Gamdevi, Bombay, India.
- POUSHKINE : BARBARA [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 52 Lancaster Gate, W.2.
- ROWSE : ERIC ANTHONY AMBROSE [Special], Flat 4, St. Stephen's House, St. Stephen's Square, Bayswater, W.
- SIMPSON : DOUGLAS JAMES [Final], 51 Downs Park West, Bristol.
- THOMAS : BRYAN WILLIAM RYLANDS [Passed five years' course at Cardiff Technical College. Exempted from Final Examination after passing Examination in Professional Practice], Briar Dene, North Road, Cardiff.
- VINE : RONALD OWEN [Final], 7 Whymark Avenue, Wood Green, N.22.
- WATSON : EDWIN [Final], 86 Orchard Road, Erdington, Birmingham.

WELSH : OLIVER MARTIN [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 38 Pattison Road, N.W.2.

WILDE : GEORGE [Final], 56 Arkwright Street, Bolton.

WILFORD : CHARLES EDMUND [Special], "Wychwood," Taunton Road, Leicester.

WINTER : PERCY HAROLD, P.A.S.I. [Special], 25 Pollards Wood Road, S.W.16.

## AS HON. ASSOCIATE (1)

BATSFORD : HARRY, "Hedge Bank," 25 Russell Gardens Golders Green, N.W.11.

## Competitions

## BLACKPOOL MEMORIAL CLOCK TOWER.

The Corporation of Blackpool invite competitive designs for a Clock Tower with drinking fountain, to be erected in the new park. Assessor, Mr. E. Bertram Kirby, O.B.E. [F.] Designs to be sent in not later than Saturday, 13 February 1926. Conditions may be obtained from The Town Clerk, Town Hall, Blackpool, by depositing £1 is., which will be returnable if a *bona fide* design has been submitted.

## MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

## PROPOSED NEW PARISH CHURCH, NEWBRIDGE, MONMOUTHSHIRE.

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members are advised to take no part in the competition.

## COMPETITION FOR LARGER OFFICES. WEST BROMWICH PERMANENT BENEFIT BUILDING SOCIETY.

The President of the Royal Institute of British Architects has nominated Mr. W. Alexander Harvey, F.R.I.B.A., as assessor in this competition.

## TOPSHAM PUBLIC HALL COMPETITION.

Premiums of £50, £40 and £30 respectively are offered in the above competition. Assessor, Mr. Walter Cave [F.]. Last day for questions, 1 January 1926. Designs to be sent in by 1 April 1926. Conditions may be obtained from the Clerk to the Parish Council, Topsham, by depositing £1 is.

## BIRKENHEAD NEW ART GALLERY COMPETITION.

Proposed new Art Gallery and Museum, Birkenhead. Premiums offered £250, £175 and £100 respectively. Assessor, Sir Robert Lorimer, A.R.A., R.S.A. [F.]. Competition restricted to competitors practising as architects and being resident, or having an office within twenty miles of the Birkenhead Town Hall for the twelve

months at least prior to 1 January 1924. Conditions may be obtained from E. W. Tame, Town Clerk, Birkenhead, by depositing £2 2s.

#### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

#### LEAGUE OF NATIONS.

##### COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

#### AUSTRALIAN WAR MEMORIAL—CANBERRA.

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon, on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

## Members' Column

#### MR. MANNING ROBERTSON.

MR. MANNING ROBERTSON [A.] has transferred his practice to Provincial Bank Chambers, 3 and 4 College Street, Dublin (Telephone, Dublin 2016).

His English practice will be carried on in co-operation with Mr. Geoffrey Fildes [A.], of 73, St. George's Road, London, S.W.1.

#### FORMATION OF PARTNERSHIP.

MESSRS. J. S. GIBSON and W. S. A. GORDON have taken into partnership Mr. James M. Wilson, A.R.I.B.A., formerly director of Public Works, Baghdad, and the new firm will carry on practice at 5 Old Bond Street, W.1.

#### FLAT TO LET.

MEMBER has unfurnished flat in his own house to let. Entirely self-contained with own front door and small forecourt. It contains one large sitting-room, two small bedrooms, kitchen, bathroom, with geyser, etc., and is situated in a delightful old square three minutes from Stamford Brook Station D.R. Rent, £90 per annum. Reply Box 1116, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

## Minutes VI

#### SESSION 1925-1926.

At the Sixth General Meeting (Ordinary) of the Session 1925-1926, held on Monday, 18 January 1926, at 8 p.m., Mr. E. Guy Dawber, F.S.A., President, in the chair.

The attendance book was signed by 31 Fellows (including 20 members of the Council), 22 Associates (including 4 members of the Council), 2 Licentiates (including 1 member of the Council), and a large number of students and visitors.

The minutes of the meeting held on 4 January 1926, having been published in the JOURNAL, were taken as read and signed as correct.

The following member attending for the first time since his election was formally admitted by the President:

MR. F. HALLIWELL SHANN [F.].

The Secretary announced that the Council had nominated for election to the various classes of membership the candidates whose names are published in this issue of the JOURNAL.

The Secretary having read the Deed of Award of Prizes and Studentships, made by the Council under the Common Seal, the sealed envelopes bearing the mottoes of the successful competitors were opened and the names disclosed.

Mr. H. S. Goodhart-Rendel [F.] read a review of the works submitted for the Prizes and Studentships, 1926.

Professor E. A. Gardner, Litt.D., Vice-Chancellor of the University of London, moved, and Professor Leslie Wilkinson [F.] seconded, a vote of thanks to Mr. Goodhart-Rendel, which was passed by acclamation.

Mr. Goodhart-Rendel briefly responded.

The proceedings closed at 9.10 p.m.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

#### R.I.B.A. JOURNAL.

*Dates of Publication.*—1925: 7th, 21st November; 5th, 19th December. 1926: 9th, 23rd January; 6th, 20th February; 6th, 20th March; 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

VOL. XXXIII. No. 7

THIRD SERIES

6 FEBRUARY 1926

## Contents for 6 February 1926

	Page
DRAWING BY G. M. OPPENORDT .. .. .	<i>To face</i> 203
ADDRESS TO STUDENTS. By the President, Mr. E. Guy Dawber .. .. .	203
Vote of Thanks .. .. .	207
SOME PROBLEMS IN THE CONSTRUCTION OF BUILDINGS CONSIDERED EXPERIMENTALLY. By Professor E. G. Coker .. .. .	209
REVIEW :	
WESTMINSTER ABBEY RE-EXAMINED. By Ernest A. R. Rahbula .. .. .	226
CORRESPONDENCE :	
LINCOLN CATHEDRAL. By W. A. Forsyth .. .. .	227
MODERN TENDENCIES IN FRENCH ARCHITECTURE. By S. Woods Hill and H. P. L. Cart de Lafontaine .. .. .	228
THE CONDITION OF THE BUILDING INDUSTRY. By W. R. Cole Adams .. .. .	228
THE ARCHITECT AND HIS WORK. By F. J. Cooke .. .. .	229
ALLIED SOCIETIES :	
BRISTOL SOCIETY OF ARCHITECTS .. .. .	229
NORTHERN ARCHITECTURAL ASSOCIATION .. .. .	230
DEVON AND EXETER ARCHITECTURAL SOCIETY .. .. .	230
LEICESTER AND LEICESTERSHIRE SOCIETY OF ARCHITECTS .. .. .	230
OBITUARY :	
FRANCIS BAKER AND JAMES FORBES .. .. .	231
AMALGAMATION OF THE R.I.B.A. AND THE SOCIETY OF ARCHITECTS .. .. .	231
NOTES FROM MINUTES OF COUNCIL .. .. .	231
BOARD OF ARCHITECTURAL EDUCATION .. .. .	233
NOTICES .. .. .	234
COMPETITIONS .. .. .	235
MEMBERS' COLUMN .. .. .	236
MINUTES .. .. .	236



FROM AN ORIGINAL DRAWING BY G. M. OPPENORDT (1672-1742)  
R.I.B.A. Collection





## Address to Students

BY THE PRESIDENT, MR. E. GUY DAWBER.

*[Delivered at the General Meeting of the Royal Institute of British Architects, on Monday, 1 February 1926.]*

I DO not wish to weary you with the trite remark that we are all students. Having arrived at your present stage of learning you will have discovered that the sense of power derived from the acquisition of knowledge and the increased appreciation and enjoyment it gives of the fine things in life render its pursuit one of the main objects of our existence.

We, your elders, are far more interested in you than you are in us. We are not in the least important to you, and we know that age is not necessarily another word for wisdom.

You have all of your own ideas and have no doubt, and quite rightly, settled long ago the plan of life and work you will follow, so that I do not propose to offer you any advice on that subject. But perhaps you can profit, if you wish to do so, by the experience of older men, and especially by their mistakes and failures, and so I propose to tell you a little of the difficulties and the problems which occur in every day practice and the facts which have to be faced in the calling which you have chosen. The first, and a very important point in our profession, and indeed in any profession, is the acquisition of a good, sound education, for without it an architect, however gifted as a designer, can

neither cope with the difficulties which continually arise in his daily work nor meet his clients on equal ground. At the same time, although I am a firm believer in the advantages of an academic training, I am equally certain that an academic education only will not be of any use unless you have practical knowledge and understanding as well. If you study the lives of the men who have been successful you will observe that they have achieved success primarily through love of their work, but you will also realise that affection for the chosen pursuit is not by any means sufficient, and that the most important thing is the absolute determination to pass nothing as understood which is not understood. It is all very well to be persevering and ambitious, but these qualities will not serve unless you have practical knowledge and a grasp of your subject. All your academic prizes and learning may be mere lumber unless they bring you increased understanding.

At the outset of my career I always found that one of the most difficult things was to realise the ideas of my clients, not because I was incapable of doing so but because my enthusiasm for my own conceptions blocked the view. I have learned in years of practice the absolute necessity of concen-

trating all one's efforts on the complete understanding of one's clients' views and wishes, though I am not suggesting the advisability of carrying out all their ideas. Far from it.

Another difficulty which confronts one is the necessity of disregarding the importunities of small details and subordinating them to the main conception. The difficulty of knowing what to do is often nothing compared to the difficulty of knowing what not to do. I am reminded of the admirable advice given me years ago by a very great and shrewd man of the world who had both knowledge and a great love of art. He told me when I started practice for myself never to neglect the smallest trifle that went wrong in any commission that I had to execute, and, however irksome and infinitesimal it seemed, to give it my own personal attention at all costs. He also urged me never to delay the immediate settlement of the smallest detail, or the answering of letters; for arrears of correspondence and small things to be attended to, if allowed to accumulate, worry and depress like unpaid debts. All these precepts I have always tried to follow.

Life, after all, consists mainly in the settlement of small details of daily routine. It is not often we are called upon to make an important decision or to solve an insuperable difficulty; but when we have to face a serious problem we find that the settling of some minor matter about which we can see our way clearly will often help to overcome the serious trouble. It is the doing of what we can do which helps us in the doing of what may seem impossible.

Another of the difficulties of the calling you have adopted, which comprises so wide and various a scope and requires such an exacting apprenticeship, is the necessity for fitting in one's artistic ideas with the stern realities of every day business.

Neither genius nor ability will avail if the practical side is neglected. What credit will you gain for your charmingly designed rooms, your beautiful elevations, or your well-chosen materials, if the rain gets through the walls, or the chimneys smoke, or your work costs more than it should? These may alienate at the end of your commission the friendship and esteem of a client which you may have greatly prized. Believe me, these are not matters to be lightly passed over. You young men are very fortunate to be living in this age with all the facilities and opportunities which are provided for study. When I look back on the days of my

pupilage in a country town with none of the advantages you have to-day, I am amazed at the progress being made every year in the systematic education of architects in the various schools and universities throughout the country. The haphazard method of teaching, or not teaching at all, in my early days, depended in a great measure on the master in whose office we served our apprenticeship, and it says a great deal for the system of those days that all our most excellent and brilliant architects went through this method of training.

On the other hand, it is open to question whether the teaching in our architectural schools to-day tends not only to the elimination of individuality but to the production of a stereotyped sameness of idea—of mass production in fact. This perhaps is unavoidable when the students in each school go through the same training and are taught to solve their problems in more or less the same way; but here again everything will depend upon the student himself, whether he wishes to become a mere cog in the architectural machine, or to make his own way and strike out a line for himself.

I have always felt that students, at any rate for some part of their training, should be taught architecture by architects themselves, by those who come into daily contact with the difficulties and facts of every-day practice and keep abreast of the problems of the moment. In days gone by all our great painters and sculptors learnt their arts in the studios and workshops of the actual craftsmen themselves—they saw work being carried out before their eyes by men who gained their living by it, a system followed I believe in France to-day.

Our schools encourage this training and urge that all students, after passing through their school or university course, should spend time in an architect's office as improvers or assistants before attempting to commence practice on their own account.

Many years ago, through force of circumstances owing to serious overstrain of my eyes, I spent some years as Clerk of Works on two large buildings, one in London and one in the country. For some three or four years I daily superintended the quarrying and working of stone, the shaping and fitting of timber, and the placing of each in their respective positions in the building; the arrangements of systems of heating, electricity, and sanitation, all of great interest in themselves, and each contributing towards the completion



of the whole structure. Many consider this sort of training superfluous and that work of this nature should be delegated to others, but without practical knowledge of the capabilities and limitations of materials it is impossible to utilize them properly in the buildings you design so as to obtain the best results and the relative values from each. The experience I gained of the use of material and of simple problems of construction has been of inestimable value to me all my life, and I would strongly urge you to try and follow the same course.

In the attempt to make your work stand out and surpass that of your contemporaries, while many of you will no doubt be attracted to the latest movements, it is just as well to pause before you allow yourselves to be carried away by novelty, for the essential thing in originality is the idea, and if it is a new idea it is worth noting. But do not easily be led off the beaten track to follow it. Just as you know that the best building materials are our own native stone, brick and tile, so you will find that the best buildings from every point of view are those which are worked out in a simple, straightforward, common-sense manner. The study of good buildings in any country shows that the finest proportions, the happiest effects, both in plan and elevation, are obtained in the simplest and most direct way.

The question of taste in this country to-day is a very serious one, a question which is greatly exercising the minds of all lovers of town and country. When you come to think of it, it is highly improbable that in Renaissance times the "man in the street" in Rome or Florence really possessed any more definitely trained taste in architecture than our people to-day. But without doubt they had some instinctive sense of proportion, dignity and suitability that enabled them to appreciate the work of their builders. If we could only reach that stage in this country we should have infinitely better architecture.

This is a question which affects you as much as it does everyone who is alive to the serious and growing danger in our midst, for in your hands lies much of the future remedy. Although a great deal can be gained by publicity, this in itself is quite insufficient to meet the case, for the average citizen will pay little attention to propaganda about a subject in which he is not interested. The indifference of the public to the importance of civic beauty is a lamentable and tragic fact. We might look upon

the recent acrimonious criticisms in connection with the Rima figure as a most salutary sign had they not been so misdirected. After all, the figure of Rima, whether you approve of it or not, occupies only one small and very secluded spot in Hyde Park. It is seen by only a small percentage of people who mostly go out of their way on purpose to inspect it. But, unfortunately, the buildings which we see throughout the country, in its towns and villages, and in the heart of beautiful rural spots, are much more in evidence. Had the public who were so upset by the Hudson Memorial raised their voices against the ruin of our countryside, how deeply and with what gratitude should we have welcomed their interest.

There cannot be good architecture in any country unless there is a public demand for and an appreciation of fine work. When we look back to the days of ancient Rome, we see that all its great monarchs and legislators understood and appreciated the value of great architectural monuments as an appeal to the civic pride and patriotism of the people.

Julius Cæsar built the Basilica Julia in the Forum, Agrippa the Coliseum, and Caracalla gave the people the marvellous baths which still bear his name and which, in spite of his vices and cruelties, gained him great popularity. Maxentius again, who understood the majesty of the law, added to its importance and dignity by erecting the basilica which is now known as the Basilica of Constantine; and in later times we see the indirect influence of architecture on the religious mind and how the Church has always fostered its appeal to the senses by erecting the most beautiful buildings in which to minister to the religious wants of the community.

Think what an opportunity has been lost in this country since the close of the war, when instead of erecting the countless memorials, which, after all, are but the expression of the sentiment of the moment, the nation had demanded some great memorial which would have stood for all time as a symbol of the country's greatness and sacrifice.

To-day the public of all classes is largely indifferent to its surroundings. It knows but little of the claims of architecture or its influence upon our lives. Although architecture, in certain instances, as practised to-day was never at a higher level, unfortunately this is only a small proportion of the whole, the bulk of the buildings we see around

us being of inferior merit and generally not the work of architects at all.

Our profession, unfortunately, lends itself easily to the charlatan and the ill-informed, many of whom possess no architectural qualifications, and the inability of the public to discriminate between the good and the bad perpetuates the evil. The only remedy lies in education. We are doing our utmost to train you students to become good architects, to give you the best possible tuition to fit you for the positions you will ultimately be called upon to fill, and if we do this it is only right that the public generally should be educated to understand what architects are doing and striving for.

The teachers in our elementary and secondary schools, and for that matter in our public schools, as a rule know nothing about architecture, nor of its importance to the community at large; and even the teachers at our colleges and universities are in the main ill-equipped in that direction. I do not suggest that they or their pupils should be taught architecture in the technical sense, but I do feel that we should try to get into the curricula of our schools some definite recognition of the importance of architecture and town planning to the ordinary citizen. The student should be taught the value of dignified buildings, of well-arranged streets and open spaces, of cleanliness, order, and spaciousness in our public thoroughfares, and the maintenance of the civic spirit in the city, town or village he dwells in. Had this been done 30 or 40 years ago the lamentable sights we see on all sides, the ill-considered buildings placed without regard to their environment, would never have come into being.

In any social assembly to-day you will find the subjects of architecture, painting and sculpture are seldom mentioned, seldom even considered as worthy of discussion, unless to express the feelings of those who borrow their ideas from the current press upon the ugliness of Rima, the unsuitability of the Artillery Memorial, or the replacement of the Piccadilly fountain. Any intelligent criticism of the architectural buildings in our towns, cities, or villages is never heard. The subject is considered as too uninteresting for discussion, and the average man is as ignorant of its real importance in relation to civilised life as the inhabitants of Timbuctoo.

In the eighteenth century, and even later, no well-educated gentleman was considered to have com-

pleted his studies unless he had made the grand tour of the principal towns and cities of Europe. If you read any of the old diaries and memoirs you will find a large part of their authors' travels was spent in seeing and studying with intelligence the achievements of architecture and the kindred arts. On their return they influenced that happy spirit of cultured design, good proportion and refined detail that you almost invariably see in eighteenth century work. At that time there was a definite tradition of design and craftsmanship throughout the whole country. If a house was built, however small, some simple formula was followed; good well-proportioned doors and windows; simple brickwork and tiled roof; a rational use of material that tended to produce a sense of quiet refinement that is sadly lacking to-day.

The late W. S. Gilbert never wrote a truer saying than when Bunthorne remarked in "Patience" that "Art stopped short at the cultivated court of the Empress Josephine"; and if you think it out the beginning of the nineteenth century did see the dying out of great craftsmanship and traditional design in architecture, and though much has been done, and is being done, to foster it again, it is, after all, but a sporadic effort. For remember that all great art is based on tradition, and however much you may wander in the seductive by-ways of so-called originality, you will ultimately return to the fold of traditional sanity. And this is where you young men can do so much to help. By your training you are taught to understand the meaning of team work, or, in other words, you are beginning to establish a tradition in architectural design, some settled method by which in the future the perpetuation of the trivialities we see on all sides would be impossible.

And now let me say that I think all of you young men are greatly to be congratulated in choosing a profession which is worthy of your enthusiasm and highest endeavour, and in the service of which no man can do better than devote his life. Indeed, I envy you. What would I not give to be standing where you are now with the future before you? I shall never forget the joy when at last I got my first job and watched its daily progress: the setting-out of the building site, the digging of the trenches for the foundations, the gradual rising of the walls, the covering of the whole by the roof, the fitting up of the internal details, and, finally, the whole work completed. And then how I wished that I could



rebuild it all over again quite differently ! This dissatisfaction with one's work, though discouraging, has often a salutary effect ; it is indeed a good plan when you begin to think yourself the last word as an architect to steady yourself by remembering the great men who went before.

When you set up in practice and things go wrong, as sometimes they are bound to do, in moments of despair you may feel that the bottom is falling out of everything. Never be discouraged. Work is the thing, and if you stick to your work and give it the attention which affection engenders you will certainly find, after waiting, one door open—it may

be only a small and unimportant door but it will lead to the opening of others. Should you have a long time to wait between the intervals do not fret, for sooner or later work will come, as much as you want. Some of you may have ill-luck, and when you have reached the twilight of your days you may look back on your life as a failure. But remember the best of us are failures, and those of you who reach the goal at which you have aimed will know that the fun has not been in getting to the top but in the striving. For, as Dean Inge says, "Life is a game worth playing but the struggle is the prize."

### Vote of Thanks to the President

Sir FRANK DICKSEE, P.R.A., in proposing a vote of thanks to the President for his address, said : I cannot help thinking that if you had selected a representative student to have proposed this resolution it would have been more appropriate, because the advice that has been given to you is so sound that, although we all greatly benefit by what we have heard, the students must do so in a much greater degree. The President has directed your attention more to the craftsmanship of your profession than to the artistic side. He warns you against being merely a cog in a wheel, and he not only warns you but he inspires you by example. We old men know that our advice is not generally taken, especially in the higher flights where those who have the vision naturally see more than those who only dream dreams ; but I think even the youngest here will admit that there is room for the older members to give advice to the younger. It is, of course, very difficult indeed to establish a tradition, and it seems to me that it is more difficult still in a country which is a democracy. Democracy is a necessity for us : we can have nothing else ; but it makes it a little difficult for some phases of art to manifest themselves in a full and satisfactory degree. All the fine specimens of arts which were mentioned by the President have been encouraged, and more or less created, by cultured and well-informed individuals in power—emperors, popes—men who have imbued themselves with tradition. It is very hard for the general public to venture to criticise architecture when they see the divided opinion among architects themselves. Any increased art education in the public, however, would be welcomed, I am sure, by every artist, and especially by an artist who is an architect. But how it is to be brought about I do not know. We can only do it by presenting fine examples of architecture to the public. But who is to initiate this ? It is left mostly to committees who are not much better informed than the ordinary public to select an architect for a building.

Mistakes must be made in that way. We must hope and trust in the higher education of members of the public. I have been told—I do not know if it is the first time—that ladies have been successful in competitions this year. It would have been a charming incident this evening if, instead of the President of the Royal Academy, one out of the lady students had tendered this vote of thanks to the President.

Mr. J. WELLS, M.A., Warden of Wadham College and Vice-Chancellor, Oxford University, in seconding the vote of thanks, said : I re-echo Sir Frank Dicksee's wish that we had some of the successful lady students taking part in this vote of thanks.

I should like to illustrate what the President said as to being at times sparing in your decoration, trusting to the beauty of the lines of your building design and proportion. My own College, which others besides myself consider one of the most beautiful in Oxford, has this great distinction, that in the whole of it—it was finished in 1613—there is no piece of carved work anywhere on the stone except in the archway over the entrance hall. The whole of the rest of the building gains its beauty from the extreme simplicity of the lines and the lack of decoration.

The President pleased me greatly by laying stress upon the importance of tradition which is embodied in relics of the past. Too many of them are disappearing ; but they are still left, I think, in greater abundance in England than in almost any country in Western Europe. Our English villages, and many of our country towns, still preserve the beauty of the past, and surely there is no country in the world where the parish churches are so characteristic of the people and contain such an amount of artistic wealth. There is perhaps no suggestion which an outsider can more confidently give than to urge architects to make themselves familiar with the traditions which we have in our English churches. We are very apt to think that

what we want done must be done regardless of the past. Is it not a safe rule to say that where you have a building, whether it be a church, a guildhall or a cottage, which has been thought out and carefully built in the past, you should keep it, if it is strong and will hold together. Do not, on the ground that there is a crack here or a defect there, say, "Pull it down and let us build it up again." Some of our up-to-date people sixty years ago said that the Chapel of Exeter College was in danger and likely to fall down, and when they came to take it down and build a new one they had to use gunpowder. If a thing is useful still, and if it is done in the best way of the time, leave it. Your taste may be different now, but it is probable that your grandchildren may abuse your memory if you pull it down now and put up the newest thing.

I think Sir Frank Dicksee, in his admirable speech, took a rather too gloomy view of the part which

democracy plays in the control of architecture. Is not there something to be said for the view that possibly democracy may give architecture its new chance? Do not we hope in the future that the money which democracy spends lavishly will be spent on buildings? Because, after all, buildings can appeal to the eyes of the many in a way that no other form of art can. May we not hope that the democracy of the future will not only ask for noble town halls, baths and bridges which will be for their use, but that they will also insist on having them put up in a beautiful form? May we not hope that the big town in the future, by fresh air and open spaces, by giving us good buildings for their proper use, will be more worthy of the great tradition of the past, and rather more beautiful than the towns of the present day?

The vote was put to the meeting by the Hon. Secretary and carried by acclamation.





# Some Problems in the Construction of Buildings Considered Experimentally\*

By E. G. COKER, M.A., D.Sc., F.R.S., M.Inst.C.E., PROFESSOR OF CIVIL AND MECHANICAL ENGINEERING, UNIVERSITY COLLEGE, LONDON.

IT is probably the experience of most architects, when designing a new building or altering an old one, that constructional problems arise for which no ready means of solution are known or can be devised from fundamental principles, and reliance must be placed on existing precedents in order to deal with a stress problem of a new type. Such difficulties are not likely to be less in the future, since buildings tend to increase in complexity, and especially so in cities where the business community finds it necessary to concentrate in a comparatively small area, and accommodation is needed for a very large number of people who require all the conveniences of modern life for the quick dispatch of business.

In recent years the want of such accommodation at a reasonable cost has been felt in the City of London and in many other places. This has led to suggestions for tall buildings in which constructional problems arise of great complexity. In a sense we are fortunate in that many of these problems have already been solved for us in other parts of the world, although new factors are bound to occur if very high buildings are constructed here similar to those found in New York and many other American and Canadian cities. Attention was drawn to some apparently simple problems during a recent alteration and extension of the Engineering Building at University College. These had to be settled at once as they arose, but references made at the time to standard works on building construction appeared to give little precise information concerning them, and if a solution was indicated it was generally either a rule of thumb method, of which the origin was difficult if not impossible to trace, and often of such simplicity that it seemed unlikely to have a very substantial basis.

As an instance of such simple solutions the case may be quoted of a brick wall in which it is desired to cut a rectangular window opening. Some text books state that the top of the window supports a triangular portion of the wall somewhat as shown by dotted lines in Fig. 1, but experiments described later indicate that the effects of stress here are more complex and not likely to be due to such a simple form of loading.

If we assume that such a load is borne by a beam of uniform transverse section with ends secured horizontally, it is easy to calculate the stress distribution on a lintel of span  $L$  considered as a beam without end fixing, from which the uniform contra-flexural bending moment  $M_0$  can be calculated. We find for this case that the bending moment

$$M_x = w \left( \frac{L^2 x}{8} - \frac{x^3}{6} \right) \text{ or } x < \frac{L}{2}$$

gives

$$M_0 = - \int_0^{L/2} (M_x \cdot dx) \Big|_{L/2} = - \frac{5}{192} w L^3$$

for the ends and for the central bending moment a value

$$M_c = \frac{3}{192} w L^3.$$

At distances of approximately  $\frac{1}{2}L$  from the ends the bending moment is zero. On these assumptions the stress distribution at the top and bottom faces of the lintel correspond in scale to the ordinates of the bending moment diagram, Fig. 1. This case has not been directly investigated here, but the more difficult cases analytically of monolithic structures have been experimentally examined by aid of transparent models in which it is found that the stress distributions at the horizontal contours of window openings show somewhat more complicated stress distributions of the same nature, which are, however, not independent of the total load borne upon them.

Another problem which appears to offer scope for investigation, as little information can apparently be found bearing upon it, relates to the way in which a load is distributed at the footings of a wall. This case presented itself when a floor of an old building was lowered several feet, thereby exposing the upper part of the footings and making access to the wall somewhat difficult. The question arose whether it was safe to cut away the projecting parts of the footings in such a manner as to leave an inclined surface,  $AB$  Fig. 2, on each side. The effect of this could not be ascertained at the time, and in order to avoid any risk the footings were built in and capped by wooden shelving,  $C$ , to form supports for light apparatus in this laboratory.

The two problems described here are typical of a number of others which were considered, and which appeared to be worth investigation by experimental means when a suitable opportunity occurred.

Direct experiments on masonry, brickwork and concrete structures are in general costly to carry out, and the results are often not capable of exact interpretation, since the probable distribution of the stresses is usually unknown beforehand and is extremely difficult to observe during the experiments. Whatever information can be gleaned is therefore obtainable from the final condition of the structure after failure has taken place. Fortunately it is not difficult to make experiments on models of walls, floors, pillars and like elements of buildings, in which the distribution of stress caused by loading can be followed with ease and accuracy nearly up to failure, and there appears to be a considerable field of work awaiting the investigator in this direction, of which the two cases selected are merely typical.

In order to illustrate a procedure which may be adopted for the examination of the stress distribution in buildings,

\* Read at University College, Gower Street, on Thursday, 17 December 1925.

it will be convenient to illustrate the general principles of the mode of investigation followed here by reference to a specific case of a brick wall, Fig. 3, say 18 inches thick with a footing spread out to give a base of 36 inches width in three steps of 3 inches, horizontally and vertically. If a short length of this wall be taken resting on a flat surface below and loaded uniformly all over its upper surface above, it will be subjected to stress throughout very similar to that experienced in a long wall loaded in the same fashion, and at and near the footing the state of stress, at any point  $A$  along a line drawn through  $A$

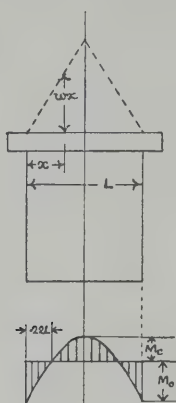


FIG. 1

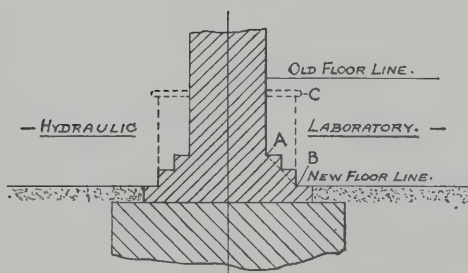


FIG. 2

perpendicular to the bounding faces, is sure to be somewhat complicated because the cross sectional area changes suddenly at definite intervals.

If now a model of this wall is constructed of transparent material and is viewed in a beam of polarized light, it is possible to find the average stress along the line through  $A$ , or along any other line parallel to it in this structure, because the loading causes the transparent material to become doubly refractive.

This temporary double refraction produced by loading is a valuable means of finding the state of stress in the interior of a transparent body, especially as the stresses found can be measured with an accuracy of say  $\pm 2$  per cent., if sufficient care is taken, and it is moreover capable of proof for bodies which conform to the elastic law that the stresses found in such models are the same as those

experienced in similar monolithic structures of similar shape loaded in the same fashion.

It is therefore of interest to describe in some detail what takes place when a beam of plane polarized light  $A$  traverses the model. This beam is represented conventionally as a wave  $P$  vibrating transversely in a definite plane passing through its line of direction, and when it reaches the model its further progress takes place through material which along the line through  $A$  is subjected to a state of stress which may be represented by a pair of stresses acting normally to a pair of opposite faces of a rectangular prism of square cross section, having this line as its axis, the other two faces being, in general, stressed by another pair of normal stresses  $q$ . The effect of these stresses is to cause the single wave  $P$  to break up into two waves, one of which undulates in the direction of the stress system  $p$  and the other in the direction  $q$ .

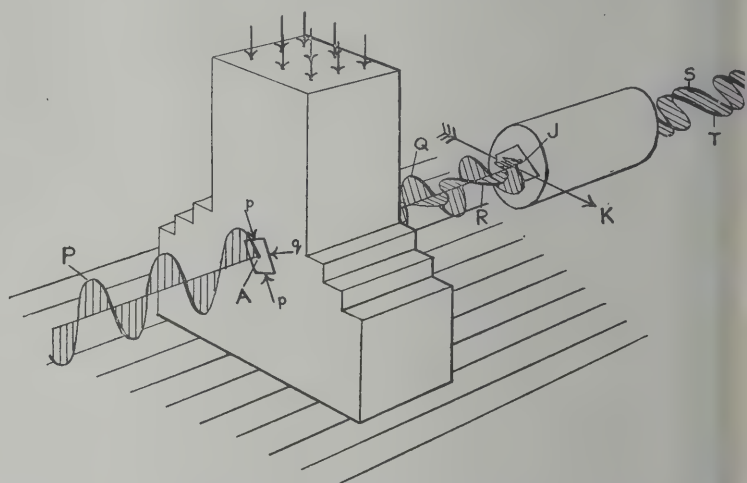


FIG. 3.—DIAGRAM OF THE PASSAGE OF A POLARIZED BEAM OF LIGHT THROUGH A PLATE OF STRESSED MATERIAL

In addition, each wave is retarded by the action of the stresses, one proportionally to the stress  $p$  and the other proportionally to the stress  $q$ . Hence the emergent beam consists of two waves  $Q$  and  $R$  vibrating at right angles to one another, and one is also in advance of the other proportionally to the difference  $(p-q)$ .

Now plane waves of light at right angles have no effect upon each other which is visible to the eye, and in order to produce such an effect a crystal of Iceland spar  $J$  is interposed, which selects such components of these emerging waves as are parallel to the direction of the arrow passing through the opposite angles of the crystal. The remainder of the light is rejected by this crystal, which latter, however, does not alter the relative retardation of the component waves. When these component waves  $S$  and  $T$  emerge, they are able to cause interference which is visible to the eye as a colour effect, and when white light is employed for the initial beam a set of prismatic colours mark the numerical difference between the stresses  $p$  and  $q$  over the area viewed. It is usually convenient to express the values of  $(p-q)$  so obtained by comparing them with the colour effects produced in a member of the same



thickness subjected to simple compression or simple tension, whichever may be most convenient. If the stress is this latter member is  $r$  when its colour effects exactly match those at  $A$ , we have

$$r = p - q.$$

Further, if we wish to obtain  $p$  and  $q$  separately, it is a comparatively simple matter to do so by measuring the change in length of the line through  $A$ , since this change is proportional to the added effects of  $p$  and  $q$ . If this change is referred to the standard member already used for the optical measurement, and it is found that a stress  $s$  in it gives the same lateral change in thickness, as is produced in  $A B$ , we have

$$s = p + q$$

and therefore

$$p = \frac{1}{2}(r + s) \text{ and } q = \frac{1}{2}(s - r)$$

We have therefore arrived at the values of both  $p$  and  $q$  by aid of two simple measurements, but we do not yet know their actual directions.

These latter are, however, not difficult to obtain, for if the incident light is vibrating in the direction of either of the stresses  $p$  and  $q$ , and the prism  $J$  has its angular position adjusted so that only waves vibrating at right angles to the incident beam can pass through, then all light is stopped along the line through  $A$  and a black dot is shown on the projected image, and the arrow gives the directions of both  $p$  and  $q$ , since

$$\theta_p \sim \theta_q = \frac{\pi}{2}$$

For any one position of the arrow  $K$  it is usual to find that there is an aggregation of these black dots on a specimen forming bands of varying shape, which indicate that along any one of these all the stresses are in the same direction. In the example chosen for illustration it is in fact found that these bands have the forms shown in Fig. 4, so that, for example, the band marked  $75^\circ$  indicates all the places on the specimen where the stress is inclined at that angle to the base, and similarly for any other band. The outermost one marked  $90^\circ$  indicates that all the stresses on this line are perpendicular to the base, and in this case it will be found that this curve is also a boundary line such that all the directions of stress in the area above and in the area below are all perpendicular to the base, for these areas show a black field of view when the polarising and analysing prisms are set vertically and horizontally respectively. In experimental work it is necessary to set the reference member in the direction of the stress, and it is therefore convenient to have a map of their directions, which is easier to use than the black bands on the left half of Fig. 4.

If we assume conventionally that uniform stress in the upper part of the specimen is represented by lines equally spaced, and these are allowed to thread their way through to the base, the directions to be taken are indicated by the black bands and a map is obtained as shown in the right hand of Fig. 4, which is very convenient for use. These latter curves may be looked upon as "lines of stress," for a stress acts along them at any point, and it changes its magnitude from point to point. There are, in fact, two such sets of curves mutually perpendicular to each other, forming a mesh or network giving the lines

of push and pull in any given case of a plate loaded by forces in its own plane.

It is worth while pointing out that the main value of such experimental measurements of the stress distribution in a plate model arises from the fact that the stresses as measured are the average of the stresses along a line perpendicular to the faces of the plate and passing through any point  $A$ , and unless the plate is very thick the variation in the stress condition across the thickness is small, so that the stresses for all practical purposes are those at a point. Each set of three measurements giving  $p$  and  $q$ , and their directions, is also independent of those obtained at any other point and also of any theory of their distribution and variation.

We may now turn to the problem in hand of determining the distribution of stress in a monolithic footing for a wall which is taken for convenience as 18 inches thick, spread out to 36 inches by stepped intervals of  $4\frac{1}{2}$  inches horizontally and vertically. This wall is represented by a small model, Fig. 5, cut from a sheet of nitrocellulose as a convenient material for observation, since it shows marked optical effects under stress.

The model is loaded in a special form of press, which is capable of exerting a very accurately applied compression load upon the end faces. The effect of applying load between two plane faces of different materials introduces, however, some local disturbances at the areas of contact, and an even distribution of stress is only possible at a small distance away from the pressure plates of the machine, unless these latter are made of the same material and are exactly of the same size as the ends of the model. In this case the ends rest directly on steel plates, and if the model is viewed in a field of polarised light these local disturbances are easily perceived to die away rapidly, and the colours observed at a short distance from the surfaces of separation indicate uniform loading near each end.

The most important matter is to determine the maximum intensity of stress and its position, and, as may be readily seen from optical experiment, the maximum stress occurs at the ends of the junction of the wall with the footing. Indeed, nowhere else does the stress intensity approach that found at these points. In order to determine the distribution here, advantage is taken of the fact that one principal stress is zero at the contour, and to trace the variation in intensity of the other the movement of the purple blue band is observed for different loads, and where it intersects the contour the stress for a definite load is obtained by simple proportion. A total load of forty-four pounds on the specimen, giving an average distribution on the upper part of the model of 587 pounds per square inch, is found to produce a maximum intensity of 1,785 pounds per square inch at a point just below the line of junction of the wall with the footing, and on the curved fillet of 1.32 inches radius. The use of curves at re-entrant angles in this and other cases is to avoid the occurrence of very great stress which a load may produce at these angles if practical conditions are faithfully represented. The variation of stress intensity throughout is indicated by ordinates to the face of the wall and gives a curve of stress distribution  $A B C$ , Fig. 6, which intersects the

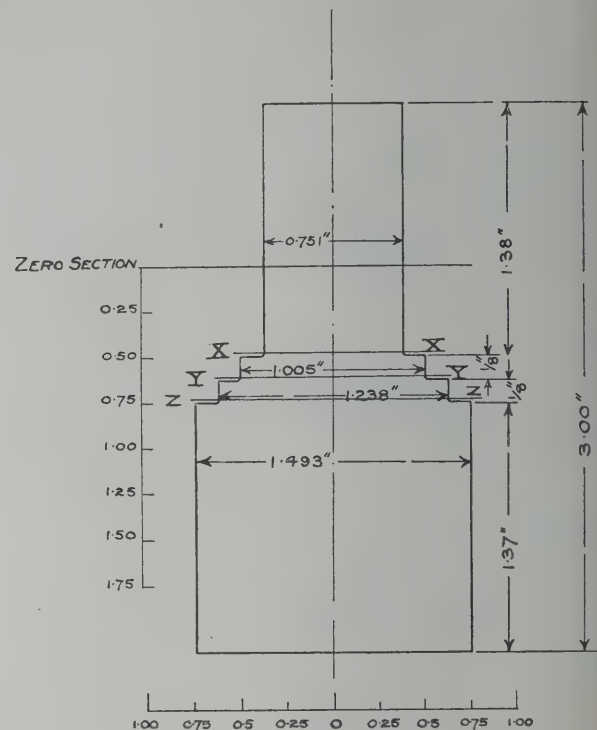
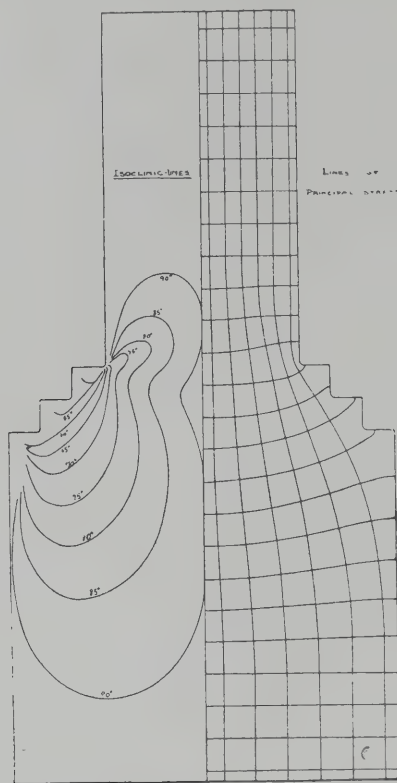


FIG. 5.—MODEL OF A STEPPED FOOTING

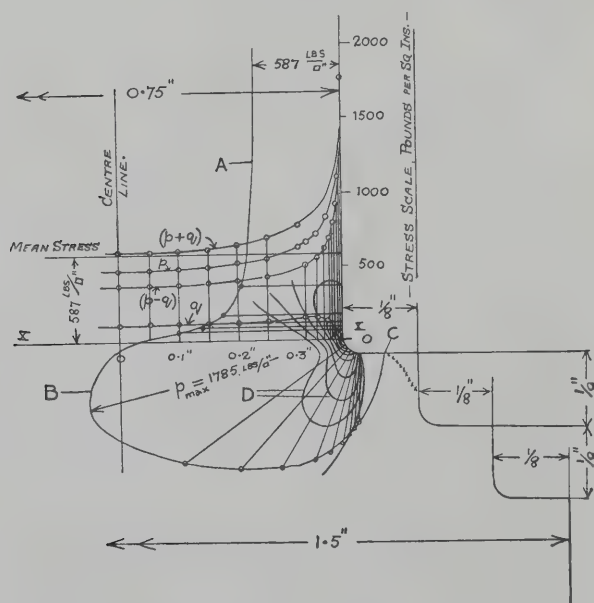


FIG. 6.—STRESS DISTRIBUTION OF THE CONTOUR AND AT THE SECTION XX OF A STEPPED FOOTING

base at  $G$ , where the stress is zero. It is also zero in the approximately triangular area indicated close to the point  $G$ .

The method of measurement is also illustrated by the inclusion of a few of the purple blue bands *D* used, from which points on the curve of distribution are found as indicated in the figure.

In order to determine the stress distribution across a horizontal section, an addition to this procedure is necessary, for here both the principal stresses  $p$  and  $q$  must be found and, moreover, they intersect the section at varying angles throughout as the lines of principal stress on Fig. 4 indicate. One way of finding  $p$  and  $q$  is to measure  $(p-q)$  optically, and  $(p+q)$  by observations of the change of thickness under load. A tension or comparison member cut from the same plate and under suitably varied tension then serves to calibrate both sets of measurements.

This involves a set of measurements of  $(p \pm q)$ , the results of which are recorded in the accompanying Table I, from which it is now possible to separate the constituents  $p$  and  $q$ , and it is then found that there is (in addition to a nearly normal stress  $p$ , indicated in Fig. 6 as lying midway between the  $(p + q)$  curves) a variable cross stress  $q$  which rises from a value of about 110 pounds per square inch at the centre to a maximum value of about 170 pounds per square inch near the ends of the section and falling to zero at the contour. At every point, except the end ones, we have in fact a pair of principal stresses



# STRESS DISTRIBUTION AT THE XX SECTION OF THE STEPPED FOOTING.

DIST. FROM CENTRE LINE (INS.)	$\theta$ DEGREES	STRESSES IN POUNDS PER SQ. INS.							$\frac{\sum(p_n)}{X}$ LBS./SQ. IN.	$p_{mean}$ LBS. PER SQ. IN.	ERROR PER CENT.
		$(p+q)$	$(p-q)$	$p$	$q$	$p \cos^2 \theta$	$q \sin^2 \theta$	$p_n$			
0.00	0	600	375	488	112	488	0	488			
0.05	0.7	600	375	488	112	488	0	488			
0.10	2.3	615	375	495	120	495	0	495			
0.15	4.6	620	390	505	115	501	1	502			
0.20	7.0	650	405	528	122	519	2	521			
0.25	10.5	700	430	565	135	546	5	551			
0.29	13.0	776	475	625	150	593	8	601			
0.30	13.8	785	490	638	147	600	9	609		$\frac{44}{0.75 \times 0.1}$	
0.316	15.0	825	515	670	155	624	10	634	575	587	-2.2
0.336	17.0	900	570	735	165	670	14	684			
0.345	—	955	630	792	163	—	—	—			
0.354	—	1035	700	867	168	—	—	—			
0.360	—	1125	800	965	165	—	—	—			
0.365	—	1255	925	1090	165	—	—	—			
0.368	—	1370	1105	1238	132	—	—	—			
0.371	—	1500	1365	1432	68	—	—	—			
0.375	—	1785	1785	1785	0	1785	0	1785			

TABLE I

# STRESS DISTRIBUTION AT THE SECTION XX OF THE MODIFIED FOOTING.

DIST. FROM CENTRE LINE (INS.)	$\theta$ DEGREES	STRESSES IN POUNDS PER SQ. INS.							$\frac{\sum p_n}{L}$	$p_{mean}$ LBS PER SQ. INS.	ERROR PER CENT.
		$(p+q)$	$(p-q)$	$p$	$q$	$p \cos^2 \theta$	$q \sin^2 \theta$	$p_n$			
0.00	0	600	375	488	113	488	0	488			
0.05	1.0°	605	375	488	113	488	0	488			
0.10	2.4°	605	380	495	110	493	0	493			
0.15	3.3°	625	385	505	120	502	1	503			
0.20	7.0	660	420	540	120	534	2	536			
0.25	10.0	715	445	580	135	563	4	567			
0.275	—	—	465	—	—	—	—	—	579	$\frac{44}{0.752 \times 0.1}$	-1.0
0.30	14.5	805	495	650	155	609	10	619			
0.302	—	—	505	—	—	—	—	—			
0.325	—	—	555	—	—	—	—	—			
0.340	—	—	620	—	—	—	—	—			
0.350	22.0	965	710	833	127	740	18	758			
0.358	—	—	815	—	—	—	—	—			
0.364	—	—	970	—	—	—	—	—			
0.369	—	—	1180	—	—	—	—	—			
0.376	16.3	1640	1640	1640	0	1510	0	1510			

TABLE II

acting across the section, and their resolved sum in the vertical direction equals the total load  $P$ .

This sum can easily be shown to be

$$p = \sum p_n \cdot \delta s = \sum (p \cos^2 \theta + q \sin^2 \theta) \delta s$$

Where  $\theta$  is the inclination of a stress to the vertical,  $\delta s$  is the element of area of the cross section and  $p_n$  is the normal load upon it. We have, therefore, an opportunity of ascertaining the general accuracy of the measurements by graphically integrating the area between the base and the curve of normal distribution  $p_n$ , obtained experimentally, and comparing it with the area given

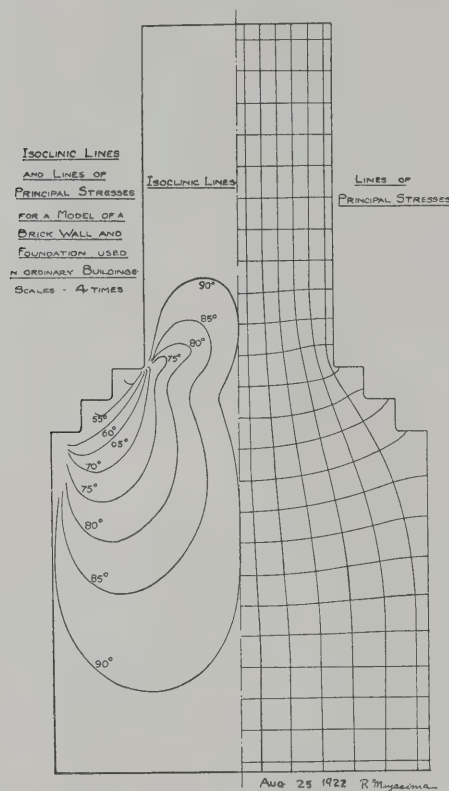


FIG. 7.—ISOCLINICS AND LINES OF PRINCIPAL STRESS IN MODIFIED FOOTING

by the mean average value of 587 pounds per square inch due to the applied load. The figures for this comparison are included in Table I, and it is found that the mean value of  $p_n$  as measured is 575 pounds per square inch, giving an error of 2.2 per cent. in defect, which represents careful work on the part of the observer, Mr. R. Miyasima, for this type of measurement.

It will now be of interest to examine the question of the effect of cutting away the stepped footings to give a sloping contour of 45°, as this problem was the starting point of this investigation, as described above. Colour photographs show that the projecting angles of the steps are under no stress, since a dark field is observed there similar to the background, which does not change under

load, although the re-entrant angles are under stress which diminishes in intensity with the spread of the base. It seems probable, therefore, that the removal of the parts under no stress will not alter the distribution very much, even although this process involves a cut along a line tangential to the re-entrant angles.

Even in a footing so drastically modified, only slight changes take place in the directions of the lines of principal stress, as is shown by Fig. 7, in which these directions are plotted to correspond with Fig. 4.

Proceeding exactly in the same manner as before, the contour stress is determined and is plotted on the accompanying Fig. 8, from which it will be noticed with the assistance of the measurements contained in Table II, that with a slightly lower average stress of

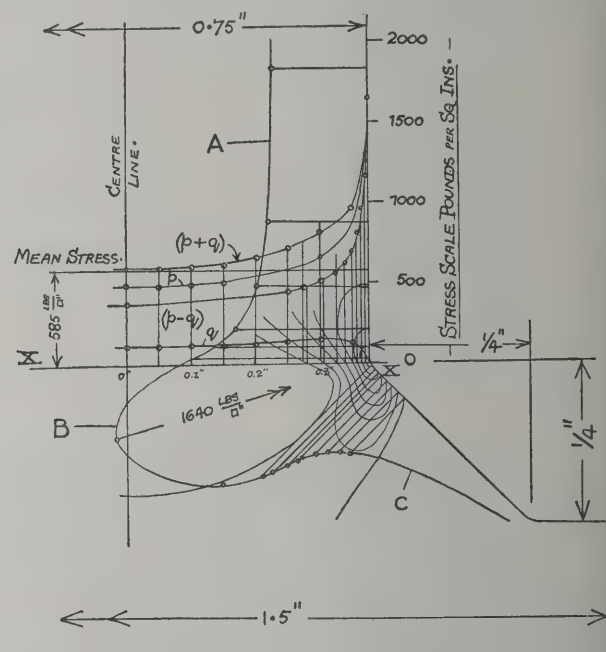


FIG. 8.—STRESS DISTRIBUTION OF THE CONTOUR, AND AT THE SECTION XX OF THE MODIFIED FOOTING

585 pounds per square inch the maximum stress falls from 1,785 pounds per square inch to 1,640 pounds per square inch. In order to put this beyond all doubt, other models were made and the general result confirmed that cutting away a footing in this manner lowers the stress at the join; but, as the new curve of distribution  $A B C$  shows, this is accompanied by a modification of the stress along the contour below the join, in which there is at first a very rapid diminution of stress intensity which ultimately becomes almost negligible when the contour again becomes horizontal. As might perhaps be expected, the stress distribution across the section XX shows very little change, but it has a slight tendency to more equable distribution owing to the end maxima being less pronounced. In this case the general accuracy of the measurements is somewhat improved (Table II), as 99 per cent. of the load is accounted for.



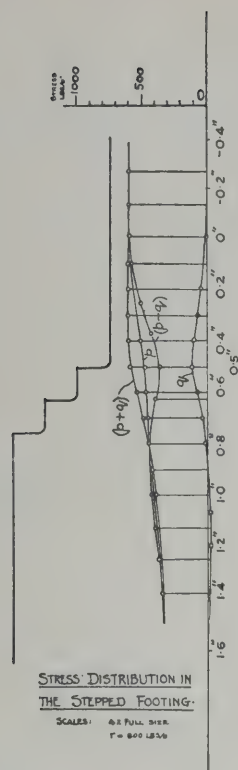


FIG. 9.—STRESS DISTRIBUTION ALONG THE AXIAL LINE OF THE STEPPED FOOTING

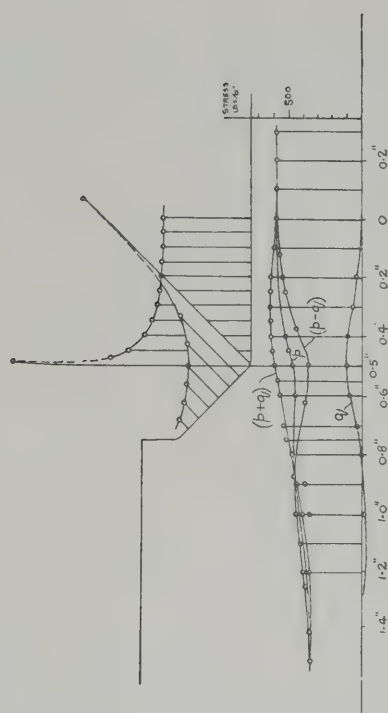


FIG. 10.—STRESS DISTRIBUTION ALONG THE AXIAL LINE OF THE MODIFIED FOOTING

### STRESS DISTRIBUTION ALONG CENTRAL LINE OF STEPPED FOOTING.

y INS	STRESSES IN POUNDS PER SQ. INS.				y (INS)	STRESSES IN POUNDS PER SQ. INS.			
	(p-q)	(p+q)	p	q		(p-q)	(p+q)	p	q
-0.375	587	-	-	-	+0.625	-	-	-	-
-0.250	587	587	587	0	0.700	420	480	450	30
-0.125	587	587	587	0	0.750	425	-	-	-
0	587	587	587	0	0.800	435	445	440	5
+0.100	587	590	587	2	0.875	430	-	-	-
+0.125	580	587	585	3	0.900	440	420	430	-10
+0.200	550	600	575	25	1.000	430	395	413	-18
0.250	515	-	-	-					
0.300	490	600	545	55					
0.375	425	-	-	-					
0.400	420	600	510	90					
0.500	365	590	480	90					
0.600	390	530	460	70					

TABLE III

Although the chief interest in these two problems is in the place of maximum stress there are various other stress distributions which may claim our attention, and one of these is the stress distribution along the longitudinal central section of the wall footing.

The effect of the external contour upon this is unlikely to be very great, although it may be appreciable, while the more or less abrupt change of section tends to produce cross stress. There is no means here of checking the accuracy of measurement except from the general consideration, already stated, that for the same distributed load it is to be expected that very similar distributions will be found which will only differ as regards their minor characteristics owing to the distance of the contours from the section, and this proves to be the case.

In the stepped footing cross compression stress  $q$  begins to appear in the wall well above the footing, and attains its maximum value at or near the junction, Fig. 9; it then decreases in value and ultimately becomes zero at a point rather below the junction of the footing with the base. The main longitudinal stress  $p$  shows a gradual diminution of stress as it passes through the region of discontinuity from 587 pounds per square inch to values which are influenced and raised by the end contact pressures (Table III).

In the case of the modified footing, distributions are found of much the same kind (Fig. 10 and Table IV), thus confirming the view that for this longitudinal section the influence of the contour is practically negligible and that the cross stress, although small numerically, extends a considerable distance into the wall itself.

The stress distributions at other horizontal sections of the stepped footing are also of interest, but are more difficult to determine, as their average values are low. It was found necessary to increase the load on the model to give an average value of 1,470 pounds per square inch on the upper section in order to determine the stress intensity at the lower sections. In the stepped footing this produced some relative change at the section X X, Fig. 6, as the maximum stresses tended to produce some permanent deformation which would tend to alter the stress distribution in its neighbourhood; but as the whole of the stress across the section was accounted for on the section Y Y, Fig. 5, it is probable that the error is not very large.

The resulting distribution, Fig. 11, shows the interesting result that the vertical stress  $p_v$  across the section rises to a maximum inside the model, due to the sudden discontinuity of the contour at  $\pm 5$  inch and its serrated outline. It will also be noticed that the cross stress is relatively small.

At the section Z Z, Fig. 5, an integration of the normal stress  $p_n$  accounts for 97 per cent of the total load. It has a non-uniform distribution of rather more than 1,100 lbs. per square inch over the central part, Fig. 12, with increased values at points distant  $\pm 26$  inches from the centre and then falls rapidly and almost linearly to the contour value, which is here very small and has a maximum intensity of about 120 pounds per square inch. The cross stress  $q$  is very small and uniform, with a value of about 50 pounds per square inch for this load, which for this section has an average value of 880 pounds per square inch.

The distribution across various sections of the modified footing have a certain amount of resemblance to the former. Thus in the model at a point 1.20 inch below the junction with the wall it is found that the stress dis-

STRESS DISTRIBUTION ALONG  
CENTRAL AXIS OF THE MODIFIED  
FOOTING.

y INS.	STRESSES, LBS PER SQ INS.			
	(p-q)	(p+q)	p	q
-0.3	587	587	587	0
-0.2	587	587	587	0
-0.1	587	587	587	0
0	580	587	584	3
+0.1	580	590	585	5
+0.125	565	605	582	23
.20	550	625	588	37
.25	530	625	577	48
.30	500	630	565	65
.35	470	630	550	80
.375	455	640	548	92
.40	430	615	523	92
.45	400	620	510	110
.50	370	590	480	110
.55	370	570	470	100
.60	380	550	465	85
.625	375	545	460	85
.650	400	500	450	50
.70	415	560	488	52
.75	428	535	482	54
.80	430	475	452	23
.875	465	450	458	-8
.90	440	445	442	+3
1.00	445	420	433	-13
1.10	420	400	410	-10
1.125	425	380	398	-18
1.20	405	370	388	-18
1.25	390	355	378	-18
1.40	360	345	353	-8

TABLE IV

tribution is of the form shown by Fig. 13 when under a load of 222 pounds. Here the maximum stresses are in the interior of the footing at points .085 inches from the ends of the cross section of the model, and these are accompanied by cross stresses of relatively small magnitude with maxima at about the same point.



The tendency in this footing as in the other is for the stress to concentrate towards the centre, as colour photographs show.

Similar results have been obtained\* in tension members

# STRESS DISTRIBUTION IN AN UNSYMMETRICAL FOOTING.

In some cases it is desirable and necessary to increase the basal area of a wall by footings on one side only, and this gives a cross section of an unsymmetrical character,

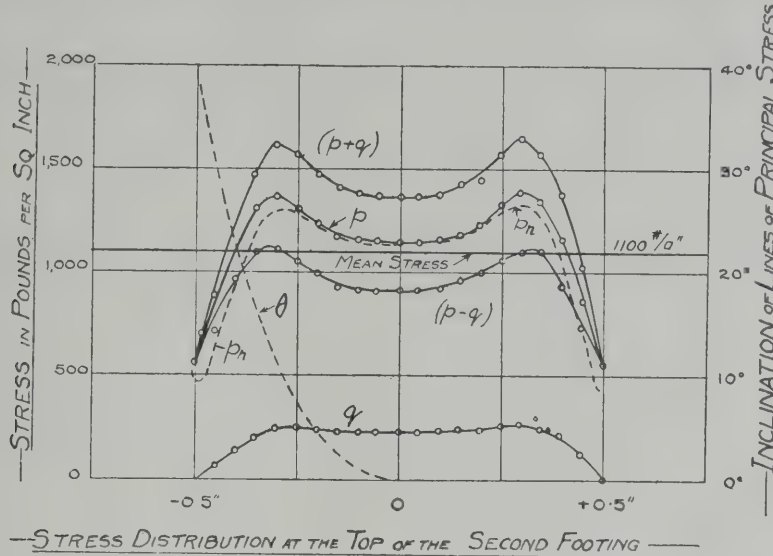


FIG. 11.—STRESS DISTRIBUTION AT THE CROSS SECTION YY OF THE STEPPED FOOTING OF FIG. 5

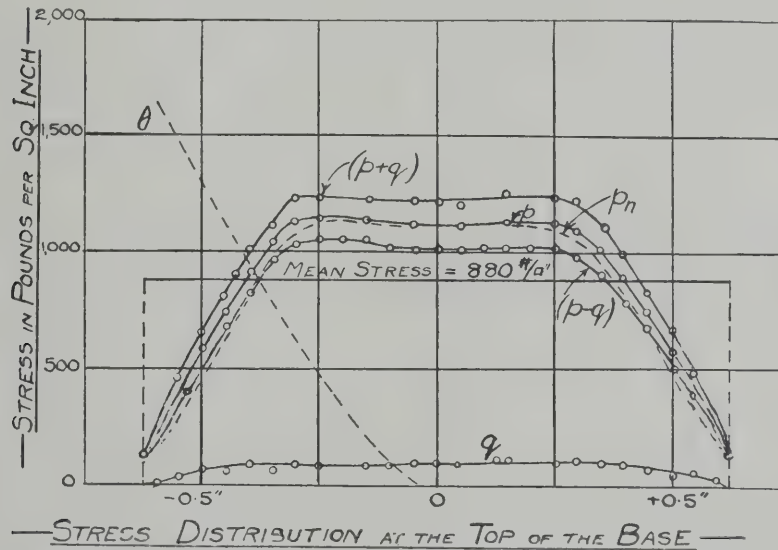


FIG. 12.—STRESS DISTRIBUTION AT THE CROSS SECTION ZZ OF THE STEPPED FOOTING OF FIG. 5

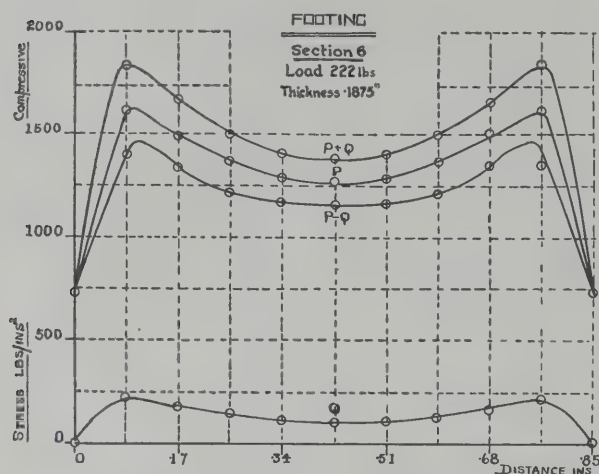
with enlarged ends when the joins are made by arcs of circles.

\* "Photo-Elastic Measurements of the Stress Distribution in Tension Members used in the Testing of Materials," by Prof. E. G. Coker, Min. Proc. Institution of Civil Engineers, vol. ccviii, 1918-19, part ii.

which is of interest and importance in practical construction. It is evident that in such a case the effect of loading one end uniformly will cause a non-uniform contact loading at the other, and in general an unsymmetrical stress distribution.

An opportunity was taken of examining one case by

cutting off one side of the stepped footing of Fig. 5, giving a model having the dimensions of Fig. 14, with end faces plane and truly parallel, and loaded in a testing machine



DIST.	P+Q	P-Q	P	Q	$\theta$	$P \cos^2 \theta$	$Q \sin^2 \theta$	$F_h$
0	740	740	740	0	45	320	0	320
.085	1840	1380	1620	220	17	1481	19	1500
.17	1660	1340	1500	160	7	1478	2	1480
.255	1510	1210	1360	150	3	1356	.2	1356
.34	1400	1160	1280	120	1	1279	.04	1279
.425	1380	1150	1265	115	0	1265	0	1265
.51	1400	1160	1280	120	1	1279	.04	1279
.595	1510	1210	1360	150	3	1356	.2	1356
.68	1660	1340	1500	160	7	1478	2	1480
.765	1840	1380	1620	220	17	1481	19	1500
.85	740	740	740	0	45	320	0	320

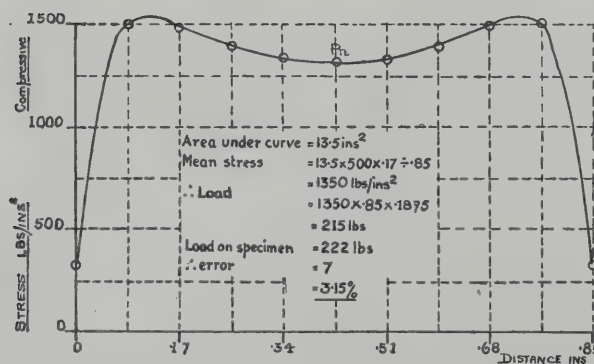


FIG. 13.—STRESS DISTRIBUTION IN THE MODIFIED FOOTING  
20 INCH BELOW

with metal end pressure plates also kept truly parallel. The conditions of loading are therefore not such as to give uniform pressures at either end, but are rather such as to tend to the production of strains in the model which, when summed vertically, shorten the model by equal amounts at any vertical section provided contact is maintained over

the end faces. This condition of loading is no doubt affected by the length of the model and the position of the change of section with reference to the ends, so that the applications of these stress measurements to practical problems of a similar nature are strictly limited, but the results are useful in forming a general idea of this type of wall problem. Under this system of load, or rather strain, the isoclinics and lines of principal stress differ a good deal from the symmetrical case, as Figs. 15 and 16 show, and an optical examination indicates that the greatest intensity of stress is still found at the join of the wall to the footing

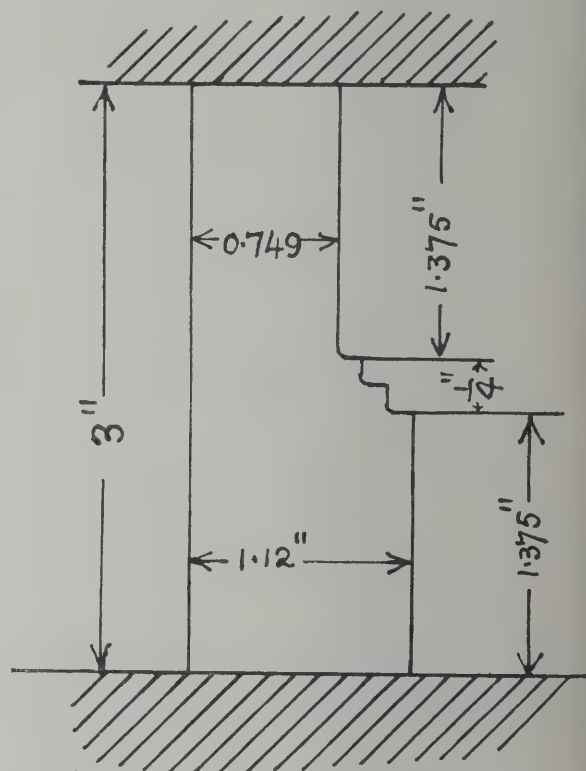


FIG. 14.—MODEL OF AN UNSYMMETRICAL FOOTING

where a break of section occurs. As this cross section is clearly the most important one, it has been examined somewhat carefully, and the measurements of Fig. 17 and Table V show that for a mean average stress of 587 pounds per square inch the maximum stress is 1,450 pounds per square inch on one side and falls to 460 lbs. per square inch on the other, but the fall from the maximum is very rapid and is practically complete in a horizontal distance of .2 inches, measured along the section. The cross stress  $q$  is not very important, as the measurements indicate, since it only reaches a maximum value of 160 lbs. per square inch at .05 inches from the left hand contour. All the load is accounted for in these measurements, Table V, and the probability is that the individual measurements are of a high order of accuracy.



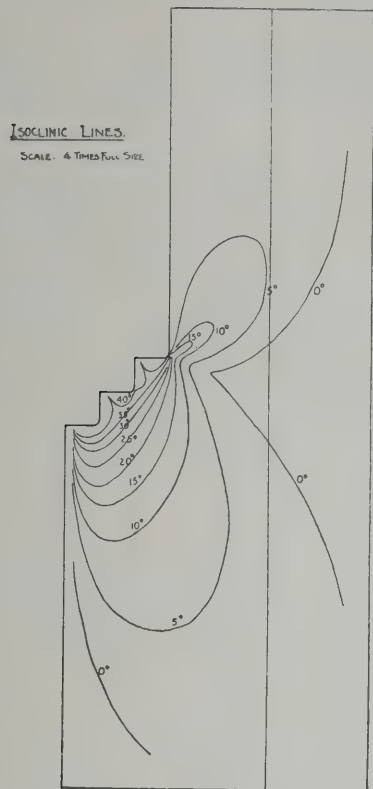


FIG. 15.—ISOCLINICS OF MODIFIED STEPPED FOOTING  
DIAGRAM OF DISTRIBUTION OF STRESSES  
SCALE: LINEAR 4 TIMES FULL SIZE  
STRESSES,  $f' = 5000 \text{ lb./sq. in.}$

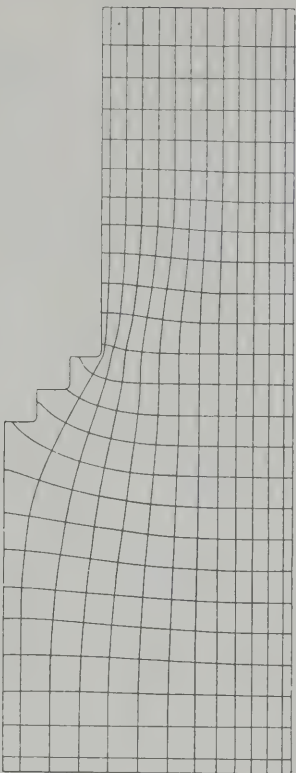


FIG. 16.—LINES OF PRINCIPAL STRESS OF MODIFIED STEPPED FOOTING

It will be noted that the stress along the contour from *A* to *B* is rising in value along the whole length measured, and on the contour *C D* there is a minimum value above the change of cross section and that the stress increases continuously in each direction from this point, but attains a greater value at the base. On the side *E F* the stress is naturally enough very small.

It is probable that a number of other problems of this type might be worth examination.

STRESS DISTRIBUTIONS DUE TO SUDDEN CHANGES IN THE CROSS SECTIONS OF WALLS CAUSED BY WINDOWS AND DOORWAYS.

The planning of buildings to give access of light and for easy communications involve discontinuities in the structure, which cause considerable local increases of stress. These are provided for in various ways by cross-girders, segmental arches and other well-known devices. The practical experience due to many centuries of use gives the constructor great confidence in the safety and stability of his designs, which is, as a rule, amply justified, although he may not know very accurately what are the stresses he has to provide for, nor is it possible in most cases to calculate them with any great accuracy. Economy in the use of material is therefore not so possible as it might be if there was a complete knowledge of the actual stress distributions.

It is not possible here to consider this question in detail, owing to the variety and extent of the problems which present themselves, but as illustrations of the applications

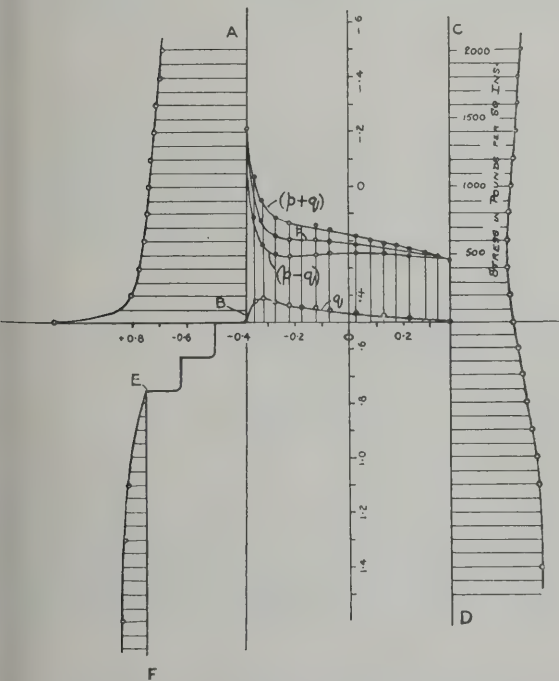


FIG. 17.—STRESS DISTRIBUTION IN MODIFIED STEPPED FOOTING

of photo-elastic investigation two problems are considered of the effect of cutting rectangular openings in a wall in which for simplicity and to avoid stresses which would

As a commencement of such an investigation we may take a rudimentary case of a square hole in a wall, Fig. 18, of limited width to suit the stressing appliances

### STRESS DISTRIBUTION ALONG 0.5" HORIZONTAL LINE

$x$ INS	$\theta^\circ$	STRESSES IN POUNDS PER SQUARE INCH.							$\frac{p_n}{L}$	APPLIED LOAD LBS/IN	ERROR PER CENT.
		(p-q)	(p+q)	p	q	$p \cos^2 \theta$	$q \sin^2 \theta$	$p_n$			
0.375	0°	460	460	460	0	460	0	460	587	587	0
0.325	"	465	475	470	5	470	"	470			
0.275	"	470	500	485	15	485	"	485			
0.225	"	495	535	515	20	515	"	515			
0.175	"	495	555	525	30	525	"	525			
0.125	"	515	565	540	25	540	"	540			
0.075	"	510	600	555	45	555	"	555			
0.025	"	510	640	575	65	575	"	575			
-0.025	0.3°	480	670	575	95	575	"	575			
-0.075	0.6°	500	665	583	82	583	"	583			
-0.125	1.3°	505	720	612	108	612	"	612			
-0.175	2.5°	490	710	600	110	598	"	598			
-0.225	4.0°	495	725	610	115	604	1.0	605			
-0.275	6.0°	500	770	635	135	628	2.0	630			
-0.325	9.0°	580	900	740	160	721	4.0	725			
-0.350	15.0	780	1070	925	145	861	10.0	871			
-0.375		1450	1450	1450	0	1450	0	1450			

### CONTOUR STRESSES AT PLANE EDGE

$y$ INS	-0.5	-0.4	-0.3	-0.2	-0.1	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.4
$p$ IN $\frac{LBS}{IN^2}$	530	500	500	485	470	445	435	425	420	450	465	505	525	570	605	640	640	665

### CONTOUR STRESSES AT STEPPED EDGE

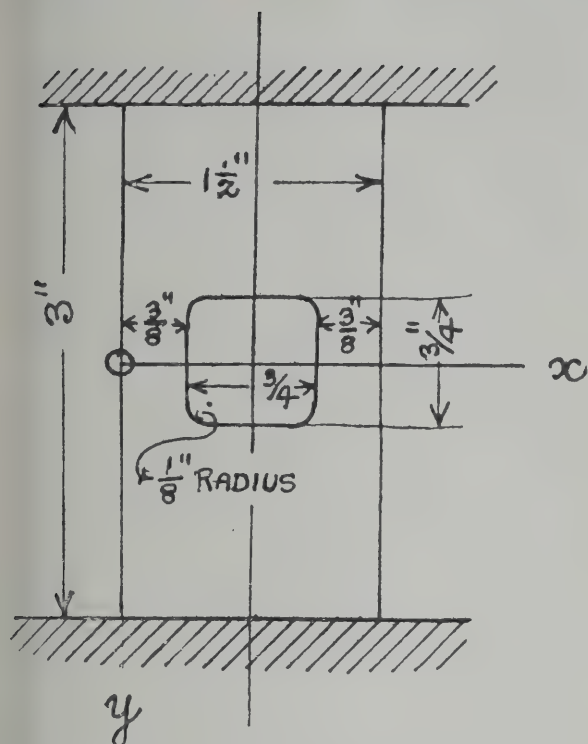
$y$ INS.	-0.5	-0.4	-0.3	-0.2	-0.1	0	0.1	0.2	0.3	0.4	0.5	-	1.1	1.3	1.6
$p$ IN $\frac{LBS}{IN^2}$	620	650	675	685	720	725	740	765	815	870	1450	-	145	165	180

TABLE V

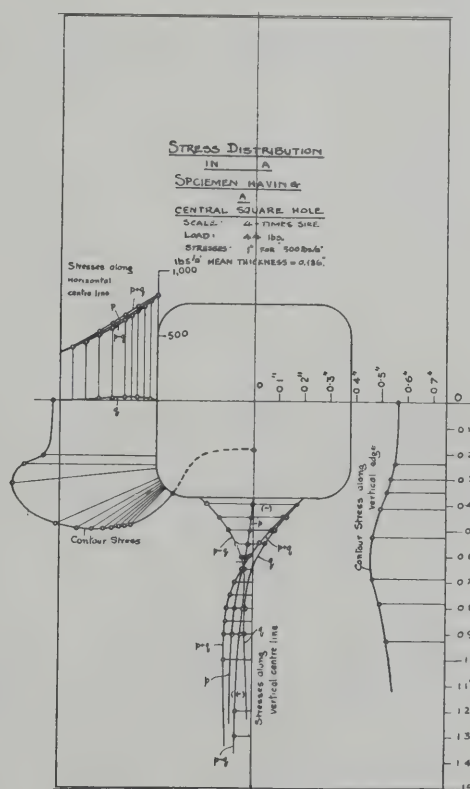
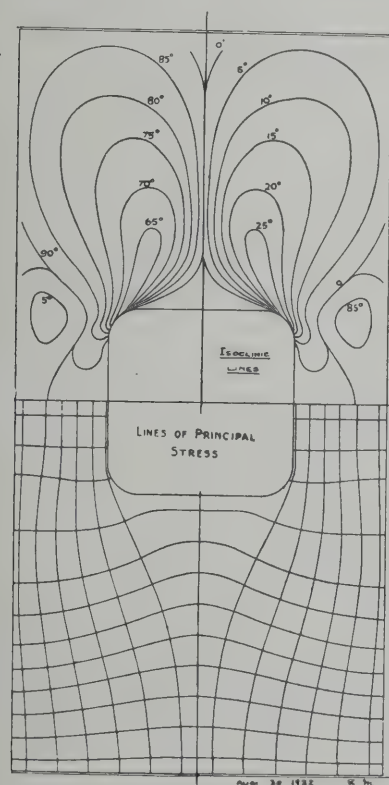
cause failure in the material the angles are rounded off to a definite radius. It would be possible to examine the effects of cross girders, segmental arches and the like above the openings, and some suggestions for the treatment of such cases are made later.

available. The effect of a direct compression load uniformly distributed over the end faces is to cause great local concentration of stress at the angles, as a colour photograph shows, and this must clearly be so, since the lines of stress have to pass around the discontinuity





If a similar plate is now pierced by two rectangular holes, the distribution of stress may be readily obtained in a similar manner, and Fig. 21 shows the lines of stress for this case, in which, as may be seen from a colour photograph, the central part of the member is mainly in pure compression for most of its length, and the side walls are under variable stress as in the earlier example, accompanied by great local stress concentration at the angles.



The detailed measurements are shown in Fig. 22, from which it may be observed that at the central cross section

linearly from 760 lbs. per square inch at the inner contour to 400 lbs. per square inch at the outer. In these cases the

STRESS DISTRIBUTION AT CENTRAL CROSS SECTION

$x$ INS.	STRESSES IN POUNDS PER SQUARE INCH.				$\frac{\sum p}{x}$	$p$ MEAN	ERROR PER CENT.
	$(p-q)$	$(p+q)$	$p$	$q$			
0	365	365	365	0	572	587	-2.6
0.050	395	410	403	8			
0.085	430	450	440	10			
0.100	450	470	460	10			
0.125	465	505	485	20			
0.150	500	530	515	15			
0.166	515	555	535	20			
0.200	550	600	575	25			
0.216	575	625	600	25			
0.250	615	665	640	25			
0.275	640	710	675	35			
0.300	690	730	710	20			
0.338	735	785	760	25			
0.350	765	785	775	10			
0.375	800	800	800	0			

STRESS DISTRIBUTION ALONG VERTICAL CENTRE LINE + = COMP. - = TENSION.

$y$ INS.	STRESSES IN POUNDS PER SQUARE INCH.			
	$(p-q)$	$(p+q)$	$p$	$q$
0.375	+385	-385	-38	-385
0.400	-350	-330	+10	-320
0.450	-255	-235	+10	-250
0.500	-185	-140	+23	-117
0.550	120	-50	+35	-85
0.600	85	+25	+65	-30
0.650	55	+85	+70	+15
0.700	-	+140	-	-
0.750	-	+170	-	-
0.800	77	+200	+139	+61
0.850	-	+210	-	-
0.900	95	+220	+158	+62
0.950	-	+220	-	-
1.000	-	+220	-	-
1.100	110	-	-	-
1.200	125	-	-	-
1.300	135	-	-	-

CONTOUR STRESSES AT INNER BOUNDARY.

$y$ INS.	0	0.214	0.25	-	-	-	-	-	-	-	-	-
$\theta$	-	-	0	6.1°	23.8°	29.1°	33.2°	37.1°	39.6°	41.4°	43.7°	45.5°
$p$	800	850	1015	1110	850	785	640	575	515	465	430	395

CONTOUR STRESSES ALONG VERTICAL OUTER BOUNDARY.

$y$ INS.	0	0.238	0.298	0.338	0.394	0.490	0.645	0.750	0.925
$p$	365	395	430	465	515	575	575	515	465

TABLE VI

for an average load of 587 pounds per square inch the stress is quite uniform and has a value of 720 pounds per square inch, while in the side walls the stress varies almost

cross stress is negligible. The mean accuracy of the measurements, as determined by an integration of the stress areas, is 2.2 per cent. in excess. We may infer that in a long



ine of windows distributed at equal intervals the intermediate brickwork or masonry is uniformly stressed, but the end wall will experience a uniformly varying stress of the type shown in this case. It is also to be noted that the contour stress of the window opening is greater at the inner rounded angle, rising to 1,450 pounds per square inch as compared with 1,150 lbs. per square inch at the corresponding point on the outer contour. The stress along the upper and lower boundaries of these openings is mainly tensional, as the curve of distribution indicates, and is very uniform near the centre with a maximum value of 385 pounds per square inch.

#### CORNICES.

Many interesting examples of stress distribution arise in cases where for either purely architectural reasons, or for strictly utilitarian purposes, masonry is undercut so that only a part of the full width of one face of two blocks in contact bears on the next block. In such a case a comparatively great intensity of stress is developed at point *A*, Fig. 23, and at the corresponding internal angle immediately above, while the distribution of pressure is in general non-uniform over the whole plane *AB*.

It has already been shown\* that when two unequal rectangular blocks of the same material are pressed together this latter effect may in general be expected, and that so far as experiments have been made uniform stress is only obtained when the two plane faces in contact are similar and equal and of the same material with loads on the end faces applied uniformly. We may, therefore, expect that if one block projects beyond the other non-uniform stress will, in general, also be found over the contact surfaces even if every care is taken to apply the load uniformly over the end faces.

Examples of this kind occur frequently in many structures. An important case is found in cornices of buildings and other structures, and this has been examined for one particular type of a cornice of the "Wren" type by Miss Janet Harris, a research student of the Engineering Department.

The isoclinic lines found here, Fig. 24, when load is applied very evenly above the cornice leave no doubt as to the non-uniform distribution of the stress at both faces, and this is confirmed by the lines of principal stress shown in Fig. 25. The colour effects observed also show that there is great stress at the ends of the face, and more especially at the end where the cornice projects.

A detailed examination of the stress distribution of the upper face *AB*, with a mean average stress of 1,600 pounds per square inch due to an applied load of 200 pounds, proves that an intensity of 2,710 pounds per square inch is developed at *A*, which falls very rapidly to 1,030 pounds per square inch and then gradually rises to 2,060 pounds per square inch at the outermost point *B*. Moreover, the stress distribution *p* is not normal and cross stress is developed which gives a tangential stress of  $p \sin^2 \theta + q \cos^2 \theta$  along the joint, and may be of considerable magnitude, as *q* itself rises to

a maximum value of 383 pounds per square inch. As a check on the accuracy of the work the total normal stress

$$\Sigma p_n = \Sigma (p \cos^2 \theta + q \sin^2 \theta)$$

shows that 194 pounds of load is accounted for by the measurements, or an error in defect of 3 per cent., Fig. 26, some part of which may possibly be accounted for by friction in the bearings of the compression machine used and slight errors in its calibration.

Similar results are obtained on the lower face which was examined independently, and the results are also recorded in Fig. 25.

The stress distributions over the upper and lower faces, while very unsymmetrical, have a near resemblance to each other and account for the load upon them. They are, in fact, such as might be expected with a cornice of a purely symmetrical type with respect to the midway horizontal plane of the stone, and we are led to infer from these results that widely different types of cornice may be expected to give somewhat similar non-uniform stress distribution over the plane faces in contact, although this conclusion requires the confirmation of further experiments on several other types.

It may seem surprising that the effect of a mere side projection should exert so great an influence on the stress distribution at the joints, especially as it is known from earlier experiments that equal rectangular blocks pressed together by uniformly applied forces on the end faces give uniform compression stress across the faces. It must, however, be borne in mind that in the latter case the strains in the direction of the load are necessarily all equal at every point, whereas in the case of a cornice the projecting part, although free from direct load, is subjected to the action of stress over two plane faces which compress the part built into the wall, and in doing this a variable strain is imposed on the free part, which is naturally most intense at the junction with the wall, but is not inconsiderable at some distance away from the face.

Stress is, therefore, produced in the projecting part of the cornice itself, as may be confirmed in a dark field of view by the application of load, which has the immediate effect of causing colour bands to appear there. The directions of this stress system are shown in Fig. 25, and this latter diagram also indicates that it is only the very outermost part of the cornice which is practically free from stress.

The resistance to deformation exerted by the projecting part of the cornice has, therefore, the effect of producing great concentration of stress at its junction with the wall and of modifying the distribution over the face in a manner which depends on the width of the joint. Proceeding inwardly along the joint the stress falls very rapidly and attains a minimum value and then steadily rises to another maximum value at the inner face.

This stress concentration at the ends of the joints, and particularly at the face of a wall may, in unfavourable circumstances, become dangerous and lead to the cornice itself being pinched off in places where, owing to unequal settlement of the foundations of a building or other causes, undue load is thrown on some part of a wall. Opening out the joints at the cornice has the effect of

\* "Contact Pressures and Stresses," by Prof. E. G. Coker, C. Chakko and M. S. Ahmed, Min. Proc. Inst. of Mechanical Engineers, 1921.

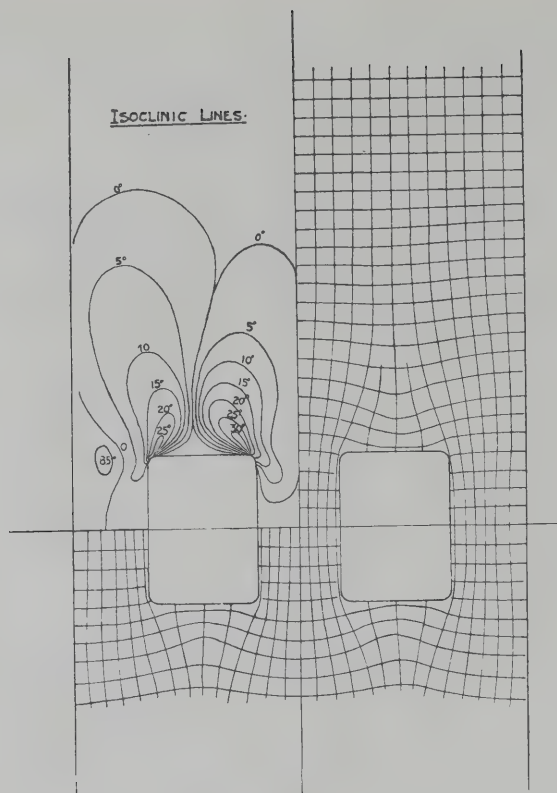


FIG. 21.—ISOCLINICS AND LINES OF PRINCIPAL STRESS IN A WALL OF LIMITED WIDTH WITH TWO RECTANGULAR OPENINGS

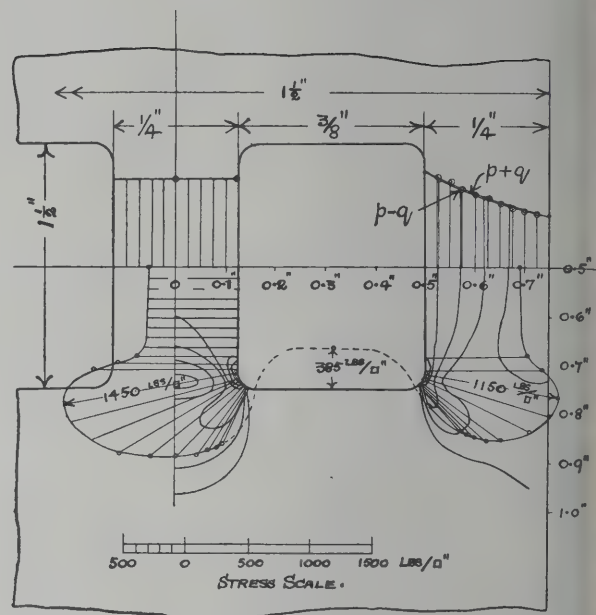


FIG. 22.—STRESS DISTRIBUTION IN A WALL OF LIMITED WIDTH WITH TWO RECTANGULAR OPENINGS

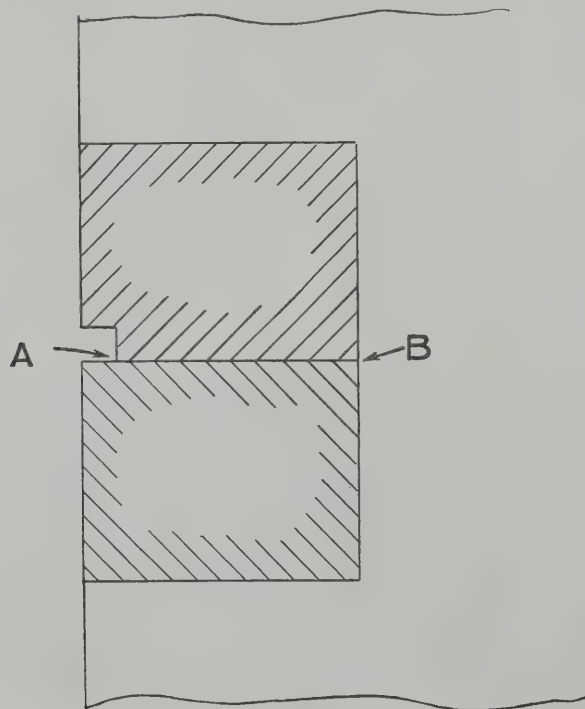


FIG. 23

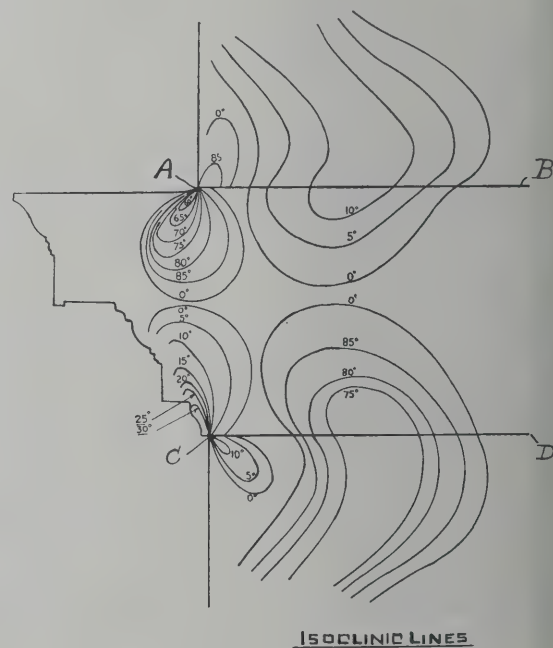


FIG. 24.—ISOCLINES "WREN" CORNICE



transferring the maximum concentration of stress to the points where the joint is carried back, and increases the stress concentration there owing to the diminished contact area, and also possibly to the increased eccentricity of the load above. Vertical slits carried a short distance into the cornice at the wall face diminish the concentrations at the ends of the horizontal joints, but introduce new ones at the ends of the slits of not much less intensity even when the ends of the slits are well rounded. From a structural point of view these observations show, in fact, that the primary defect of a cornice is that it

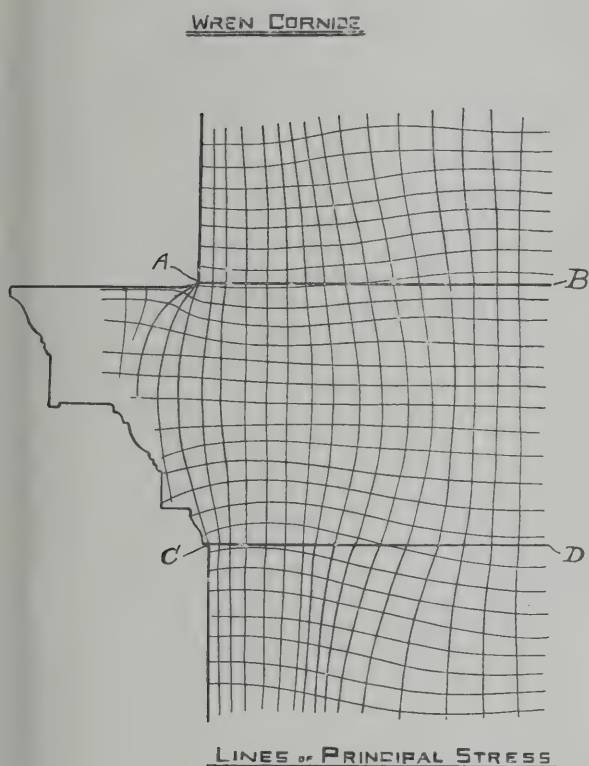


FIG. 25.—LINES OF PRINCIPAL STRESS, "WREN" CORNICE

is an addition of material in such a manner as to cause increased stress which would not otherwise develop. An appreciable reduction of stress may be obtained if the cornice is part of a block of greater depth than itself, and some preliminary measurements show that this gives some improvement in the stress concentration.

These illustrative examples are probably sufficient to give an idea of a form of investigation on the stress distributions in buildings, which is capable of great extension, since there are any number of still more complicated problems other than the types selected which could be solved, and which would probably repay examination.

It may, therefore, be of interest to outline the possibilities of further work in this direction. No attempt

has been made here to reproduce the features of the construction of building made by assembling bricks or masonry blocks bonded together in various familiar ways, but it would not be difficult to construct models in which such units are cemented together, and since there is a considerable range of transparent bodies available it is also possible to build up composite structures to represent the use of materials like brick, stone, cement and steel in combination.

In particular, the question of stress distribution in reinforced concrete structures offers a very promising

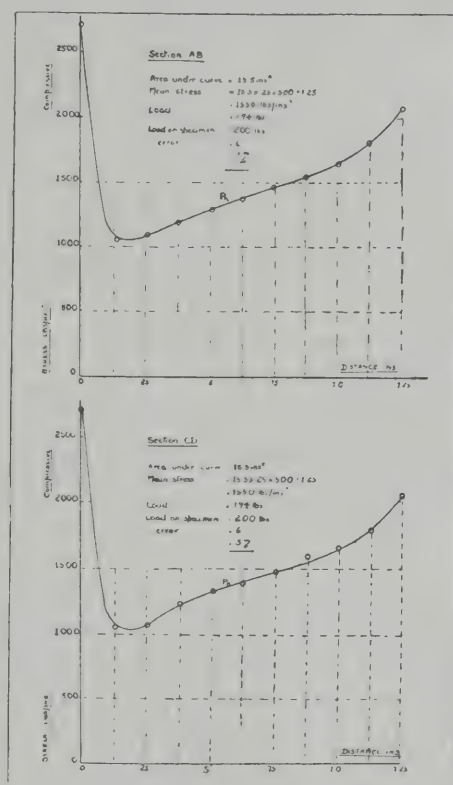


FIG. 26.—NORMAL STRESS DISTRIBUTION ON UPPER AND LOWER FACES OF "WREN" CORNICE

field of work, as experiments show on the union of transparent materials with thin rods of organic substances of superior elasticity or of metal wires.

In another direction it is found that the shaping of sections used in steel frame-works, and the riveting of these together, is quite a feasible operation and has, in fact, been accomplished for a roof now shown.

We may therefore hope that further investigation of this kind on models of buildings may afford some help to architects in providing economical structures suitable for modern necessities.

In conclusion, I wish to express my warmest thanks to my research assistants, Miss Janet Harris, B.Sc. and Mr. R. Miyasima, who have made nearly all the detailed observations described in this paper.

[The discussion on Professor Coker's Paper will be published in the next issue of the Journal on 20 February.]

# Westminster Abbey Re-examined\*

BY ERNEST A. R. RAHBULA [A.].

Few men can write on the subject of the Abbey with the authority and intimate knowledge possessed by Professor Lethaby. The new book bearing his name will therefore be welcomed by all lovers of the building, but to some it may come as a slight disappointment, when they open the volume, to find that they are already acquainted with several of the chapters which appeared as a series of articles in *The Builder* during the year 1924.

The author, however, was well advised in republishing these in the present work, which is a valuable addition to the literature on Westminster and a worthy companion to his former volume, *The King's Craftsmen*.

The new book is not, as the title may imply, a revision of the previous work, though, where in the light of fresh evidence or more considered judgment the author modifies his original opinions, he now gives us the benefit of his conclusions.

To quote from the Preface, the present volume "is a supplement to, rather than a reprint of, the former book. . . . The special subject of this, as of the earlier study, is the form and details of the Abbey Church and other buildings as first wrought and the craftsmen who worked at them. The older volume remains a fuller study of the Royal Masons and other artists, while this is a complete study of the Buildings."

The first two chapters are devoted to a discussion on the Confessor's Church and the early Norman work. Of the former, by an able analysis and co-ordination of all the available evidence, we have what is perhaps the most convincing description yet given, and it may now be accepted as established that the Presbytery was only two bays in length with an apsidal east end and was flanked by side chapels. A greater element of conjecture enters into the reconstruction of the crossing and the western limb of the church, but here the suggestion that the word *vestibulum*, in the 11th century description of the Abbey, might be interpreted as "nave," and not in its modern meaning, is probably correct.†

Considering the importance of Westminster and the relative size of the infirmary halls in other Benedictine houses, it is difficult to believe that a small building of less size than St. Katherine's Chapel would have satisfied the Abbey in the twelfth century, as is now suggested.

\**Westminster Abbey Re-examined*. By W. R. Lethaby. Duckworth, London. 1925. 21s. net.

† Since writing the above Mr. A. W. Clapham, F.S.A., tells me that in the early account of St. Ricquier Picardy, quoted by M. Durand in his monograph on the building, the word *vestibulum* is used in a sense that the author proves conclusively to have been the nave of the church.

Insufficient evidence has prevented any definite theory being advanced on the problems in connection with the thirteenth century Lady Chapel, but on the Chapel of Henry VII (for which it was demolished) we have two chapters in which it is well demonstrated how both the structure and its fittings were originally designed to emphasise the general character and purpose of this royal mausoleum.

Regarding the great rebuilding of Henry III, the record of the feverish haste with which the work was pushed forward in 1252 and the possibility of a strike of the workmen the next year, followed by a period of comparative inactivity due to troubled times, shows that the architects of those days were confronted with much the same trials which harass their successors of to-day. In discussing the influence of contemporary French architecture on this work, the Cathedral of Amiens is now substituted for Rheims as having been the greater of the two main sources of inspiration, and numerous instances of similarity between Amiens and the Abbey, not only in parts of the plan but in the details, positions and *motifs* of various carvings, are adduced to support this conclusion. It is reassuring to national pride to have the author's conviction, added to those of other authorities, that Master Henry of Reyns, the architect for Henry III's first work, was an Englishman, a theory challenged by the late Mr. Westlake in his recent great work, but the matter is purely of academic interest, and, until the birthplace and parentage of Master Henry are discovered, is quite beyond positive proof.

In the chapter on the Chapter House we have an original, and what must be a correct, reading of the larger part of the much-worn inscription on the beautiful tile floor. The work of past "restorers" generally has been considerably dealt with, and here Scott's mistake in failing to appreciate that the quatrefoil in the tympanum of the Annunciation doorway should have been left open is well argued, as are, in other parts of the book, the debatable points in connection with the original design of the north front of the North Transept.

It is impossible to make even a passing reference to the number of subjects discussed, all in the same scholarly and sympathetic manner, which brings vividly before the reader the glory of the Abbey as it was in the Middle Ages. Sculpture, glazing, mosaic-work and painting, metal work and tombs, all have their place, and we meet again with pleasure the craftsmen who fashioned them.

Accustomed as we are to seeing the Abbey in the sombre atmosphere of to-day, it takes an effort of the imagination to visualise the church as it looked



in its first freshness—sharp, unencumbered, light and undirted.” And it will come as a shock to many to be reminded of its former gayness. Few and small as the remnants are, enough evidence, however, has been found to show that not only were the walls and vaulting richly decorated with colour, but the sculpture and tombs added to this cheerfulness; even the little knight in the gable of Crouchback’s tomb,” we read, “had red cheeks and he rode a dappled horse.”

The reader will disagree with few of the conclusions arrived at on the debatable problems raised, but in treating the Roman coffin (now in the Museum) from the character of its lettering as being not later than A.D. 200, the author has omitted to reconcile the lettering with the inscription itself, which, the late Mr. J. S. Joyce pointed out, could not be earlier than the latter part of the fourth century.

The book is well produced and the type is good, but the lack of an index is felt; an obvious printer’s error on page 22 unfortunately post-dates the Norman work at Winchester Cathedral by 100 years.

Only three photographs have been included amongst the numerous drawings and sketches which illustrate the volume; most of the latter have been made by the author.

To the mixed feelings of delight or depression which follow, as one realises the wealth of what is left or contemplates the destruction of the past, must be added a sense of gratitude and relief that the buildings now in the care of such sympathetic and conservative hands. “The systematic cleaning of the structure and monuments,” writes the author at the end of one chapter, “has given me more pleasure during my little term than almost anything else—the one greater pleasure the new work I have *not* done in the ancient church.”

Would that past guardians of the Abbey, and many of those under whose care lie other of our famous buildings, could express such pious pleasure!

## Correspondence

LINCOLN CATHEDRAL.

12 Stratford Place, W.

18 January 1926.

Dear Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—We are greatly indebted to Sir Charles Nicholson and to Sir Francis Fox for their most interesting papers upon the history of the building of Lincoln Cathedral and the story of its failures and repairs. Time prevented any discussion of technical detail at the meeting and I should therefore like to offer the following observations.

A chronological record of defects and of works of repair is of great value as indicating what methods of repair are most durable.

Any large operation of grouting, however, does not appear in these records at Lincoln. Having regard to the nature of the defects, I should like to suggest a fuller consideration of the important question of shrinkage in this liquid mortar and to offer a word of warning.

Mr. Godfrey, the clerk of works, informed us that no expansion or shrinkage had been discovered in grout which had been cut out after a comparatively short test.

Having regard to the composition of the grout and its method of application, this statement conflicts with ordinary experience.

The cause of most of the trouble at Lincoln, as indeed in the majority of similar cases, is shrinkage of the core from the ashlar facing. The core and facing of the walls are unequal in their relative proportions of mortar and therefore of moisture. Judging by photographs, the aggregate of the core at Lincoln is large and uneven; therefore, the quantity of mortar must be excessive in proportion to aggregate—probably as much as 30 per cent. to 40 per cent.

A slow setting concrete of this kind is unreliable; it cannot, without structural precaution, set equally, or combine with the ashlar facing.

Its first tendency is to expand in the process of setting which, under unfavourable circumstances, will slightly bulge the facing.

The great amount of water used in the rubble and deposited as rain during building must in evaporating have involved a loss of bulk in the body of the wall.

This loss of mass is represented by the natural shrinkage of the core and the inevitable cleavage from the jointed stone skin, the mortar of which shrinks but slightly.

The grout, which is now being inserted in great quantities, is applied, as indeed the rubble was built, from the bottom upwards, and is stated to have great penetration.

It contains a very large proportion of water to cement and greater still to sand. The preparation of the walls is mainly one of complete saturation, so that there is an appreciable increase in the body of the old lime rubble, partly created by the re-energising of the lime.

The samples of grout which were exhibited at the meeting showed a very low proportion of sand to cement. This proportion requires a large amount of water for its effective working and application. Large cracks are being filled up with solid grout after a thorough preliminary saturation. The result of it all is that apart from the added weight a vast quantity of cement grout has been applied to crevices in a defective lime core, and, independently of other tendencies, must shrink in evaporating.

It is impossible to say to what extent fissures will take place, but when it is also understood that the penetration of grout is uncertain and unequal, it does seem desirable that opportunities should be seized of rebuilding the core or parts of it when they occur.

Alternatively a system of building in of brick or tile ties and grouting the intervening spaces would be more permanent in its effect than the indiscriminate grouting, with unnecessarily powerful material, walls of uncertain structural condition.

It is satisfactory to know that metal used in works of reinforcement at Lincoln are of non-corroding kind.—

Yours faithfully,

W. A. FORSYTH [F.].

## MODERN TENDENCIES IN FRENCH ARCHITECTURE.

Atelier Auguste Perrett,  
93 Avenue de la Grande-Armée,  
Palais de Bois,  
30 December 1925.

The Editor, JOURNAL, R.I.B.A.,—

DEAR SIR,—There is a statement by Col. H. P. Cart de Lafontaine in the issue of the R.I.B.A. JOURNAL for December 5 which I fear may be misleading to most readers. The statement is “*that this new orientation of architectural conception and composition has its roots in this very school*” (i.e., French National School), and is the second paragraph, first page.

The fact of the matter is that the very reverse is true, and I can only assume that your author has been misinformed.

The members of this Atelier, who read the JOURNAL, resent the above statement and have asked me to do what I can to correct it.—Yours truly,

S. WOODS HILL [A.].

6, Gray's Inn Place,  
Gray's Inn, London, W.C.1,  
18 January 1926.

The Editor, JOURNAL, R.I.B.A.,—

SIR,—I have just received Mr. S. Woods Hill's letter of December 30, 1925, and in reply to the opinion expressed therein would like to draw your correspondent's attention to the context which gives, I think, an accurate appreciation of the situation as regards architectural tendencies in France at the present time. The paragraph in my article which immediately follows that quoted by Mr. S. Woods Hill reads as follows:—“And those who took part in the recent International Congress on Architectural Education will remember that the French delegates drew attention to the two strong currents of architectural thought which exist in France at the present time, commenting on the way in which new constructional possibilities are gradually transforming preconceived standards of proportion and beauty. . . .”

It may be of sufficient interest to your readers to quote from the papers read at the Congress by Monsieur A. Defrasse, himself a “Chef d'Atelier,” and member of the Council of the “Ecole des Beaux Arts” and Monsieur Léon Jaussely, Professor at the French National School.

Monsieur Defrasse, in his paper on “Architectural Education in the Present” (pp. 43-45), says:—“I have now reached the second part of my survey, that in which I shall endeavour to set out the result of the training given at the ‘Ecole Nationale Supérieure des Beaux Arts.’ This part certainly is the most interesting, but it is also difficult, because a sincere and attentive observer must note that a spirit of unrest prevails, a period of crisis in the teaching of architecture is manifest. Professors and students alike are uncertain of their solutions, uneasy as to the direction in which their researches should be made, as doubtful as to intellectual tendencies in the matter of architectural composition and design. . . . Two currents of opinion, very distinctly divergent, exist in educated minds: some think that the rules of harmony are immutable, and that the beautiful proportions which we have inherited from the classic period and which were renewed with the Renaissance, the portion of parts

and forms, are already established and that the artist should find the expression of his personality within the framework defined by a healthy traditional style, the sure guide to good taste. Others consider that the use of new materials should modify the ancient forms and proportions, that the precursory signs of an architectural revival, of a new style, as they say, are showing themselves and they revolt against the notions resulting from tradition; no more scholarly forms for them, form should simply result from calculations and scientific facts. Monsieur Defrasse then examines the problem in some detail and remarks (of the advanced students of the Ecole des Beaux Arts): “All are moulded by healthy tradition, are able to design and move with freedom in the domain of construction. *Some have resolutely attacked the new problems; and, guided by their professors, they have become the indispensable artisans who will know how to combine the sobriety of truly modern lines with something of the greatness and beauty of the classic past.*”

The italics are mine.

Monsieur Jaussely, in his paper on “Architectural Education of the Future” (pp. 62-63), indeed goes further than this and says:—“Whatever opinion we may hold of the present evolution of architecture, it is undeniable that this evolution does exist and that we are at present witnessing conscious or unconscious attempts to renew architectural forms and æsthetics.

“This revival is more particularly noticeable in important buildings, large stores and bridges, churches, banks, cinemas, railway stations, airship sheds, etc., which we can consider are the expression of the monumentality of architecture of our time, and which logically should be compared with that of other epochs in order to understand the meaning of this architectural transformation. After examining the problem of the “new æsthetics” Professor Jaussely says:—“Does this new orientation demand a new teaching of architecture? It seems to me it must be so.”

One could continue at some length, but I hope that these opinions of our distinguished colleagues who have spent the greater part of their lives in the study of the question will be sufficient to convince your correspondent that it is not inaccurate to say “that this new orientation of architectural conception and composition has its roots in this very school (the Ecole des Beaux Arts).”

I should like to thank Mr. S. Woods Hill for having raised this point and would suggest that the apparent divergence of our views may be explained by the fact that it is extremely difficult to appreciate general tendencies unless one has a sufficiently detached position as there is always a danger of “not seeing the wood for the trees.” I am, yours faithfully,

H. P. L. CART DE LAFONTAINE [A.].

## THE CONDITION OF THE BUILDING INDUSTRY—AND INCREASED COST OF BUILDING WORK,

The Broadway,  
Totland Bay, I.W.  
20 January 1926.

The Editor, JOURNAL, R.I.B.A.,—

DEAR SIR,—In the report of the Paper read by Mr. Welch on “The Condition of the Building Industry,” at the discussion, there is a point that strikes one very forcibly.



and that is the apparent impossibility of obtaining anything like reliable statistics of output in the building trades.

Taking the case of the bricklayers; the figures given by Mr. Welch differ so completely from those given by Mr. George Hicks as to make it very difficult to form any opinion in the matter. According to Mr. Welch's figures there were 11,750 fewer bricklayers in 1924 than in 1913, and also from statistics and particulars given him by various builders a rod of brickwork takes 14 hours longer to lay than in 1913. Yet according to Mr. George Hicks two thousand million more bricks were laid in 1924 than in 1913, with 25,000 less bricklayers. The difference in these figures is so great that it makes one realise that there must be great miscalculation somewhere.

Perhaps when the joint committee of architects, builders, and operatives, proposed in the Paper, and so very desirable for the well being of the industry as a whole, is formed, it will be possible for the various parties to lay their figures and the sources from which they are obtained on a committee table, and thoroughly thrash out these impossible differences. It is only by these means, I think, that we can find out what is wrong, and endeavour, by the joint goodwill of all the parties concerned, to put our house in order and improve the noblest industry in the world.—Yours truly,

W. A. COLE ADAMS [A.].

## THE ARCHITECT AND HIS WORK.

*Prudential Chambers,  
Banbury.*

26 January 1926.

*The Editor, JOURNAL, R.I.B.A.,—*

DEAR SIR,—Allow me to offer my humble congratulations to the authors of *The Architect and His Work*. It will undoubtedly be very useful to young architects in practice, particularly those in the country. The brevity and businesslike composition are its asset.—Yours faithfully,

F. J. COOKE [L.].

# Allied Societies

## BRISTOL SOCIETY OF ARCHITECTS.

PROFESSOR ABERCROMBIE'S ADDRESS.

### "CITY IMPROVEMENTS AND REGIONAL PLANNING."

Professor P. Abercrombie, F.R.I.B.A., gave an address on "City Improvement and Regional Planning" at a meeting of the Bristol Society of Architects on 21 January. Amongst those present was Sir John Swaish (Chairman of the Bristol Town Planning Committee).

Mr. R. C. James, F.R.I.B.A. (President), who was in the chair, said the Society considered the subject was likely to interest not only architects but the general public, more especially, perhaps, landowners, and they had therefore decided to throw the meeting open to the public, and he was pleased to welcome such a large audience.

Professor Abercrombie said that some might think the title of his address should be a subject for two addresses, but his object was to try to join up the two ideas of city improvement and regional planning, and to show that they had an intimate

and real connection. The tendency in regional schemes was often to concentrate on areas between towns rather than on towns in relation to surrounding areas. There was an unreality in preparing elaborate schemes for towns without legislative means of execution, but he was emboldened to speak of city improvement from the fact that the present Minister of Health, Mr. Neville Chamberlain, was shortly to introduce much more extended powers for dealing with cities as they are. He thought there was a clear case for every town to prepare a scheme for central improvement as well as joining with near-by local authorities for preparing regional plans. All would agree that they were up against great difficulties in preparing large schemes of central improvement, such as questions of cost, compensation for property, and matters of that kind. His contention was that when they were dealing with a region such as that, for instance, in which Bath and Bristol were the two focal points, it was essential that they should think of the future of the two cities and other towns in the region in connection with the development of the countryside around. That evening he would ask them to divest themselves for a moment of any consideration of existing boundaries of authorities, for boundaries could be changed where necessary, and to think of areas on their own merits, from a three-fold point of view:—(1) Of place; (2) of work; and (3) of people. In regard to the first there were points of topography and geology to be considered. In the past there had been a tendency to ignore those and to build houses where they were most wanted on the spur of the moment. As to the second point, work, they had to consider what were the mainsprings of a town's prosperity. In some there was the residential or health consideration, such as in the case of Bath and Weston-super-Mare. At Chester, for instance, there was a variety of considerations, some of which were in opposition to one another, and it was of importance to think what should be worked for, and whether any one element should be suppressed or developed. In Bristol they had an interesting problem in the new docks being further down the river. Did that mean that the industrial element was going to change? Were the factory areas to go up the Avon towards Bath or go down the Avon in the direction of Avonmouth? What was the best use to which the valley between Bristol and Bath should be put? Should it be industrialised or kept in its beauty for recreational purposes? Then, again, what areas should be given up totally to factories, or did they intend to keep a mixture of factories and houses in certain parts? In the past, nearness to work had been the chief consideration governing the position of houses, and in Lancashire they found large mills with groups of houses around them. Since the War a most drastic revolution had come in the means of locomotion, and he thought the motor-bus was more revolutionary than the locomotive. The tendency, he thought, would be for the population to spread more over the countryside. As the towns were improved, and the centres of towns became cleared, there would be a tendency for even the poorer people to get away, and that would mean a new grouping of the population. When large masses of people moved the question was not merely one of moving out to new suburbs but of moving further afield and forming new dormitory towns. That was a point to be borne in mind in regional planning. What should be guarded against was "ribbon" development—a stretching out along the sides of new roads. That was not only ugly, but uneconomical, and a scattered population was difficult to deal with in regard to drainage, lighting and other matters. A better method was to take certain centres and develop new towns or villages, and that would require much study in regional planning. Road planning would follow on such fundamental requirements. Road planning should not dictate where people should live but be ancillary to it. The question of open spaces must be borne in mind, and should not be considered simply from the point of view of a single local authority, and he did not see why certain

local authorities should not combine to provide suitable regional open spaces. Finally, it should be seen that suitable civic centres were provided with room for development. Professor Abercrombie alluded, in conclusion, to the fact that in the Bristol and Bath district those concerned were working in close co-operation with regard to future development, much closer than in any district with which he was familiar.

A cordial vote of thanks was passed to Professor Abercrombie on the proposition of Mr. G. C. Lawrence, F.R.I.B.A., seconded by Mr. L. S. MacKenzie, the City Engineer.

#### NORTHERN ARCHITECTURAL ASSOCIATION. ANNUAL DINNER.

The annual dinner of the Northern Architectural Association was held on the 30 January. The chair was occupied by Lieut.-Col. G. Reavell, O.B.E., President of the Association, who, in proposing the toast of "Our Municipal Corporations," said a great problem was presented to their governing body in dealing with the large mass of traffic which would be created by the new bridge. They had considered that problem soundly and well, and they had eventually decided on the scheme which, by public vote, had been defeated that day. He wished that every voting paper had been headed: "Opportunities missed are seldom recalled." He could only hope that Newcastle would one day rise to its opportunities. The new street would have been a permanent asset to Newcastle.

Councillor W. Vincent Longfield (Deputy Lord Mayor) said they had spent months of strenuous work on schemes that had been turned down. While he did not feel crushed, he felt sympathy for those who did not feel as he did. He said, with the greatest respect, that in each of the particular schemes they would have to pay. He feared that cutting out the new street would submit them to a penalty of at least £50,000 a year.

The toast of "The Royal Institute of British Architects and Allied Societies" was proposed by Major Robert Temperley, M.A., O.B.E., D.L. (Chairman of Council, Newcastle Society), who expressed his pleasure that great educational bodies were prepared to co-operate in endeavouring to find the best way not only of producing good architects but also of educating public opinion in architecture.

Major Dosser (President, York and East Yorkshire Society of Architects), replying, said that co-operation between the allied societies was valuable in the direction of unity of practice and professional conduct.

Mr. Ian MacAlister, M.A. (Secretary R.I.B.A.), said they would undoubtedly be disappointed with regard to the day's news, but he was convinced that a great city like Newcastle was not going to sit down for ever under what had happened.

#### DEVON AND EXETER ARCHITECTURAL SOCIETY. FORMATION OF DESIGN CLUB AT EXETER.

A meeting to inaugurate an Architectural Design Club for Exeter and district was recently held at the University College, Exeter.

The chair was taken by Mr. E. F. Hooper, in the unavoidable absence of the President of the Society, Mr. J. Leighton Fouracre, and in addition to a large attendance of architects and students there were also present the chairman and secretary of the Exeter City Education Committee, Alderman John Stocker, and Mr. A. C. Badcoe, and the Registrar of Exeter University College, Mr. A. K. Woodbridge.

After formal business, the Chairman explained the serious need of facilities for architectural education in Exeter and district, and that, following the remarks in the President's address on this matter, at the annual meeting held in March last, a small committee was formed to suggest lines on which suitable action might be taken. With the approval of the Council of the Society, the Architectural Association was approached. They suggested that subjects should be set in accordance with the A.A. School programmes, and offered the assistance of their masters, who would visit Exeter periodically to advise students and criticise their work.

Mr. F. R. Yerbury conveyed the good wishes of his Council and said they were very willing to give every assistance in the formation of the Club.

Mr. Howard Robertson then addressed the meeting, and described in detail the scheme of training practised in the Architectural Association schools, explaining how this could be adapted to the requirements of the Exeter students. A collection of students' drawings which he had brought were used by him to illustrate the progress of a student passing through the various years of the school study.

The scheme for the working arrangements of the Club was briefly outlined by Mr. W. J. M. Thomasson.

Mr. Percy Morris proposed a vote of thanks to Mr. Yerbury and Mr. Robertson for their assistance both in preparing the initial details of the scheme and coming to Exeter to give the Club such an enthusiastic start.

#### LEICESTER AND LEICESTERSHIRE SOCIETY OF ARCHITECTS.

##### ANNUAL DINNER.

The annual dinner of the Leicester and Leicestershire Society of Architects was held on Friday, 15 January, about 40 Members and guests being present. The President (Mr. E. T. Allcock, F.R.I.B.A.) was in the chair.

The guests included the Mayor of Leicester (Alderman Banton), Mr. H. Alderman Dickman (President of the Notts and Derby Society of Architects), Mr. John Platt (Principal of the Leicester College of Art), and Messrs C. Stretton, F.R.I.B.A., and F. B. Cooper, A.R.I.B.A. The toasts included the King, Leicester City and Trade and the Society.

Mr. J. Stockdale Harrison, F.R.I.B.A. (ex-President) made presentations on behalf of the Society to Messrs C. Stretton (late Hon. Secretary) and F. B. Cooper (late Hon. Treasurer) after 15 and 10 years' service respectively.

##### PRESENTATION TO MR. GOTCH

A replica of the portrait of Mr. J. Alfred Gotch, painted by Mr. T. C. Gotch, which now hangs in the Institution Galleries, has been presented to him by his fellow townsmen of Kettering. Mr. Gotch, in his turn, presented to his native town at a large and representative gathering held on 20 January. Mr. Arthur Keen, in the unavoidable absence of Mr. Dawber, represented the R.I.B.A. at the gathering. The portrait will now form a permanent addition to the collection of the Kettering Art Gallery.

#### R.I.B.A. PAMPHLET ON "THE ARCHITECT AND HIS WORK."

This pamphlet, which was compiled by the Practical Standing Committee with the assistance of the late Mr. P. Waterhouse, Past President, has been issued by the Council with a view to bringing before the general public the function of an architect and his use to the community.

Members can obtain copies of the pamphlet for circulation to their friends, on application to the Secretary R.I.B.A. at a cost of 2s. 6d. per dozen.



## Obituary

### FRANCIS BAKER [F.].

The death has recently occurred in Canada of Francis Baker, who was a Past President of the Royal Architectural Institute of Canada, and for many years Hon. Secretary for Canada of the R.I.B.A. Mr. Baker occupied a prominent position as an architect in Toronto. He studied architecture in New York and afterwards in London in the office of the late Mr. Thomas Collcutt.

Mr. Baker was the first Canadian to be made a fellow of the Royal Institute of British Architects. Returning to Canada, he practised his profession in Toronto for upwards of thirty years. Some of the buildings he designed are the Saturday Night Building, the General Assurance Building, the Royal Bank Building, Yonge and Bloor Streets, and, in association with Carrère and Hastings, of New York, the Traders' Bank Building, Yonge and Colborne Streets. With George W. Gouinck he designed the Temple Building, Bay and Richmond Streets, the Alexandra Palace University Avenue, and the Manufacturers' Building at the Exhibition.

Mr. Baker was in his 59th year.

### JAMES FORBES [F.].

We regret to announce the death of Mr. James Forbes of Middlesbrough at the early age of 45 years. He served his articles with Messrs. R. Lofthouse & Sons, of the same town, who found him a brilliant pupil and an enthusiastic worker. On leaving them he went to London into the office of Mr. A. J. Wood and then into the office of the R.C.C., remaining in all about four years in London. He then returned to Middlesbrough, where he commenced practice on his own account in 1906. His abilities early produced for him a good general practice, which he maintained until his death. He was successful in competitions, and particularly in school work, winning the first premium for additions to the Linthorpe Schools, and the Marton Grove Secondary Schools, which are now being carried out at a cost of between £40,000 and £50,000. He also had an extensive practice in cinema work, designing and carrying out the new "Elite" Palace, Middlesbrough, at a cost of about £60,000, besides several smaller cinema theatres in the same district. He also carried out several medium-sized country houses in the district.

### A.B.S. SCHEME OF INSURANCE.

The A.B.S. specialises in Life Assurance. In Whole Life Assurance the sum assured and bonus are payable at death and the payment of premiums normally continues throughout life. The bonuses which are usually payable with the sum assured may be surrendered for cash, applied to the reduction of future premiums or used to reduce the period over which premiums are payable. The Society is not tied to any insurance office and is prepared to offer and advise upon a wide choice of policies in leading companies. Half the initial commission is returned to the assured in the form of rebate and the other half forms a direct contribution to the Society's funds.

Please address all enquiries to the Secretary, Architects' Benevolent Society, 9 Conduit Street, W.1. Telephone: Mayfair 434.

## THE AMALGAMATION OF THE R.I.B.A. AND THE SOCIETY OF ARCHITECTS.

### THE SOCIETY'S STATEMENT.

On 18 June 1925, the Society of Architects went into voluntary liquidation following its amalgamation with the Royal Institute of British Architects, prior to which the Society had made a donation of £525 to the Architects' Benevolent Society. After satisfying the Society's liabilities the liquidator has transferred to the R.I.B.A. property of the estimated value of £10,000. This includes the Society's leasehold premises in Bedford Square, £836 in cash, and invested funds amounting to £4,588, of which £3,263 is earmarked for developing and maintaining architectural scholarships including the late Society's Victory Scholarship of the value of £150.

The Institute will further benefit by the admission of some 1,400 new members transferred from the Society representing an increase in the Institute's revenue from subscriptions of over £4,000 per annum.

The Society of Architects was founded in 1884 and during the forty-one years of its existence has done much to promote the interests of architecture and architects particularly in the direction of Education and in advocating the Statutory Registration of Architects.

Under the amalgamation scheme the Institute is carrying on the Society's Educational and Registration work and has appointed Mr. C. McArthur Butler, who was Secretary of the Society for twenty-seven years, to be Secretary of the R.I.B.A. Registration Committee which has in hand the promotion of a Bill in Parliament for the Statutory Registration of Architects.

### NOTES FROM THE MINUTES OF COUNCIL.

18 January 1926.

#### THE BOARD OF ARCHITECTURAL EDUCATION.

The following were appointed Corresponding Members of the Board:—

Rodney H. Alsop, Victoria, Australia.

Professor Claude Batley, School of Architecture, Bombay.

Robert Cable, Bombay.

Professor Percy Nobbs, McGill University, Montreal.

E. M. Powers, Hon. Secretary R.I.B.A. for South Africa.

S. Hurst Seager, New Zealand.

B. M. Sullivan, Lahore, India.

Sir John Sulman, Sydney, Australia.

Professor Ramsay Traquair, McGill University, Montreal.

Professor Leslie Wilkinson, University of Sydney, Australia.

The President, Singapore Society of Architects.

Sir John Burnet, R.A., was appointed a member of the Board.

#### R.I.B.A. PRIZES AND STUDENTSHIPS.

The Award of the R.I.B.A. Prizes and Studentships for 1926 was approved and ordered to be submitted to the General Body.

## BUILDING RESEARCH.

On the advice of the Science Standing Committee it was decided to invite the Institute of Builders to nominate three members to attend the February meeting of the Science Standing Committee to discuss the question of the possibilities of co-operation in building research work between the Institute of Builders and the Science Standing Committee.

## THE BUILDING INDUSTRY.

On the advice of the Practice Standing Committee, the Council requested the Architects' and Builders' Consultation Board to take into immediate consideration as a matter of urgency the pending termination of the agreements regarding wages and hours in the building industry.

## SPECIAL ELECTION TO THE FELLOWSHIP.

Under the provisions of the Supplemental Charter, 1925, Clause IV., the following architects were elected as Fellows of the R.I.B.A. :—

Mr. T. H. Lyon, Cambridge.  
Mr. Henry Sproatt, Toronto.  
Mr. E. R. Rolph, Toronto.

## FINAL EXAMINATION.

On the advice of the Board of Architectural Education it was decided that students of Exempted Schools who are entitled to exemption from the Final Examination shall be required to come up for election as Associates within two years of the completion of their school course exempting them from the Final Examination, and that students who do not present themselves for election as Associates within these two years, except with the special permission of the Board, shall be required to take the R.I.B.A. Final Examination in the usual way if they wish to qualify for candidature as Associates.

## DIPLOMAS OF ARCHITECTURAL SCHOOLS.

On the advice of the Board of Architectural Education it was decided that members holding the Diplomas of Recognised Schools shall be entitled to have the fact recorded against their names in the R.I.B.A. *Kalendar*.

## STUDENTSHIPS.

The following were elected as Students of the R.I.B.A. :—

Alexander, Andrew Gordon, Y.M.C.A., Tottenham Court Road, W.C.  
Bedingfield, Eric Edward, 1, Endsleigh Street, W.C.1.  
Bolton, Joseph, Junr., Beaumont, Heaton, Bolton, Lancs.  
Bright, George Edward, "Heathcote," Station Road, Westcliff-on-Sea, Essex.  
Brinton, William Ralph, 20, Bigwood Court, Golders Green, N.W.11.  
Brown, Cyril Clement, 15, Ashfield Terrace East, Newcastle-on-Tyne.  
Cheesman, Kenneth, 151, Palmerston Road, N.22.  
Clay, Ralph Henry, c.o. City Architect's Dept., Guildhall, Hull.  
Clope, Samuel Douglas Neighbour, 19, Whiteford Road, Mannamead, Plymouth.  
Cooper, Reginald William Gase, "Wilstead," College Street, Long Eaton.  
Edwards, Donald Thomas, St. Dunstons, Amersham Hill, High Wycombe.

Farmer, Geoffrey John, 1, Roland Houses, South Kensington, S.W.7.  
Fry, Francis Stephen, 39, Walliscote Road, Weston-super-Mare.  
Grigg, Leslie Arnold, 64 Queen's Road, Norfolk.  
Guy, Roderick Nelson, "Dalkeith," 128 Crescent Road, South Woodford, Essex.  
Hamilton, John Visick, The Vicarage, Windsor.  
Hobbs, Athol Joseph, 48 Lancaster Park, Hill Rise, Richmond.  
Horner, Hugh Baldwin, 31 Constantine Road, Hampstead, N.W.3.  
Kemp, William Charles, 2A Portnall Road, Harrow Road, Paddington, W.9.  
Millington, Cyril Richard, c.o. Maxwell House, Arundel Street, Strand, W.C.2.  
Morrison, James, 23 Upperkirkgate, Huntly, Aberdeenshire.  
Mowbray, William Bawden, High Croft, Christchurch Park, Sutton, Surrey.  
Neil, Charles Warren, "Langley," 14 Valkyrie Road, Westcliff-on-Sea.  
Redding, Cyril Norman Meriden, Wormley, Broxbourne, Herts.  
Rowles, Douglas Laurence, "Trondra," Beltinge, Hertford Bay.  
Scammell, Rodney Quinton, 706 Coventry Road, Smeth Heath, Birmingham.  
Short, Harold, 53 Cowick Street, St. Thomas, Exeter.  
Smith, William Wilfrid, 107 Buxton Road, Heaveley, Stockport.  
Schultz, Israel, 1A Hunton Court, Hunton Street, E.1.  
Thewlis, Edward Charles, "Canonsleigh," The Cliff, Southend-on-Sea.  
Tozer, Cecil Reginald, 4 Broadgates Road, S.W.18.  
Unsworth, Herbert, 17 Gordon Avenue, Bolton, Lancs.  
Varley, Herbert, "Bramleigh," Blacko, near Nelson, Lancs.  
Wardle, Lionel Tallentyre, 9 Long Reach, West Horsley, Surrey.  
Watt, John, Education Office, East Church Street, Buckie, Banffshire.  
Wright, Gerald Ryby Hall, 7 Willow Grove, Beverley, East Yorkshire.

## MEMBERSHIP.

The following applications for membership were approved :—

As Fellows, 10.  
As Associates, 33.  
As Hon. Associates, 1.

The following nominations for membership for election, 15 February, were approved :—

As Fellows, 20.  
As Associates, 6.  
As Hon. Fellow, Sir Frank Dicksee, P.R.A.  
As Hon. Associate, Mr. F. L. M. Griggs, A.R.A.

Twelve Licentiates were elected under the provision of Section III. (f) of the Supplemental Charter of 1925.

Five Subscribers were elected under the provisions of Section VI. of the Supplemental Charter of 1925.



## REINSTATEMENT.

The following Members were reinstated :—

As Associate : E. L. Hampshire.

As Licentiate : T. Frank Hawkes.

## RESIGNATIONS.

The resignations of the following members were accepted with regret :—

A. Macpherson [F.].

Robert W. Carden [A.].

T. L. Perkins [A.].

L. H. Bullock [L.].

R. S. Cowper [L.].

A. G. Hall [L.].

D. Lyle [L.].

James Neill [L.].

J. F. Lancaster [L.].

#### THE ARCHÆOLOGICAL JOINT COMMITTEE FOR ORGANISING THE CONTROL OF ANTIQUITIES IN THE NEAR AND MIDDLE EAST.

Mr. Ernest T. Richmond [F.] was invited to represent the R.I.B.A. on the Archæological Joint Committee for organising the Control of Antiquities in the Near and Middle East.

#### IMPERIAL CONGRESS OF THE ROYAL SANITARY INSTITUTE, JULY, 1926.

Mr. H. D. Searles-Wood and Mr. J. Ernest Franck were appointed to represent the R.I.B.A. at the Imperial Congress of the Royal Sanitary Institute in July, 1926.

#### THE BRITISH ENGINEERING STANDARDS ASSOCIATION.

Mr. Harvey R. Sayer [A.] and Mr. Edwin Gunn [A.] were appointed to represent the R.I.B.A. on the following recently established Sub-committees of the B.E.S.A. National Committee on Building Materials :—

1. Sub-Committee on a Standard Specification for Grey and White Hydrated Lime.

2. Sub-Committee on Standardisation and Simplification with regard to Slates and Tiles.

#### SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES.

A contribution of £10 10s. was made to the funds of the Society for the Promotion of Hellenic Studies for the year 1925.

#### BOARD OF ARCHITECTURAL EDUCATION. THE R.I.B.A. (ANDERSON AND WEBB) SCHOLARSHIP AT CAMBRIDGE.

The Scholarship is offered by the Royal Institute of British Architects for the study of Architecture at Cambridge University by means of the three years' course in Architectural Studies, the successful completion of which carries with it the ordinary B.A. Degree of the University and exemption from the Intermediate Examination of the R.I.B.A.

The administration of the Scholarship is in the hands of the Board of Architectural Studies at Cambridge. It has an annual value of £70, is tenable for two years from October 1926, and is renewable for a third year if satisfactory progress has been made.

It is the intention of the donors that the Scholarship should be awarded to the most promising candidate from

the Public or Secondary Schools or from any Training School in Art or Technology, whose financial circumstances would not otherwise permit him to enter the University and take the Degree in Architectural Studies. It is desirable that candidates should be in their 18th or 19th year.

Every candidate must comply with the following conditions :—

1. To have passed, or have been exempted from, the Previous Examination of the University, at latest in June 1926.

2. Submit an application, with testimonials, to the Secretary of the Board of Architectural Studies not later than 5 June 1926, containing :

(a) Full name, nationality, exact age and concise particulars of education up to the time of application.

(b) Specimens of drawings, freehand or geometrical, and not less than three or more than six in number. The drawings need not necessarily be architectural. They should be sent rolled or flat (not folded) and be packed carefully.

(c) An essay, legibly written in ink or typed, on any subject selected by the candidate.

(d) A letter of recommendation from the candidate's Director of Studies, confirming the *bona fides* of the work he submits, and giving evidence of his financial necessity. It is desirable that this letter should give some information on the mathematical abilities of the candidate.

A candidate may be required to appear personally before the Board of Architectural Studies in Cambridge or in London before the end of June 1926.

EDWARD BULLOUGH,  
*Secretary to the Board of Architectural Studies,  
Gonville and Caius College, Cambridge.*

#### R.I.B.A. MAINTENANCE SCHOLARSHIPS SCHEME.

The Board of Architectural Education have been informed that the Council of the Artists' General Benevolent Institution have decided to participate in the R.I.B.A. scheme and to grant a Maintenance Scholarship, provided the parent of the student is eligible for assistance from the Institution.

Mr. Edmund Wimperis, F.R.I.B.A., has been appointed to represent the Institution on the R.I.B.A. Maintenance Scholarships Committee, the first meeting of which will be held shortly.

In addition to those provided by the R.I.B.A. and the Artists' General Benevolent Institution, Scholarships have been given by the Society of Architects (now amalgamated with the R.I.B.A.) and by the proprietors of *The Builder*, while the Rev. Dr. and Mrs. Hugh Currie have decided to found, in due course, a Maintenance Scholarship in memory of their son.

#### R.I.B.A. VISITING BOARD.

The R.I.B.A. Visiting Board have had under consideration an application from the Central Technical College, Brisbane, for the recognition of its four years' part-time course as exempting from the R.I.B.A. Intermediate Examination.

The Visiting Board have nominated Professor Leslie Wilkinson as their representative to visit the Central Technical College, Brisbane, and to report upon the application for exemption.

Special meetings of the R.I.B.A. Visiting Board (excluding meetings connected with visits to Schools of Architecture) will be held at the R.I.B.A. on the following dates :—

24 June 1926.  
21 October 1926.

Schools of Architecture wishing to bring any matters before the R.I.B.A. Visiting Board should communicate with the Secretary to the Board of Architectural Education not later than 1 June and 1 October 1926.

#### R.I.B.A. EXAMINATIONS.

The following are the dates for the forthcoming R.I.B.A. examinations :—

*Intermediate Examination.*—May 28, 29, 31, June 1 and 3, 1926. (Last day for receiving applications—23 April 1926.)

November 19, 20, 22, 23 and 25, 1926. (Last day for receiving applications—16 October 1926.)

*Final and Special Examinations.*—July 7, 8, 9, 10, 12, 13 and 15, 1926. (Last day for receiving applications—4 June 1926.)

December 1, 2, 3, 4, 6, 7 and 9, 1926. (Last day for receiving applications—30 October 1926.)

*Examination for the R.I.B.A. Diploma in Town Planning.*—June 30, July 1, 2 and 5, 1926. (Last day for receiving applications—1 March 1926.)

*Statutory Examination.*—October 20, 21 and 22, 1926. (Last day for receiving applications—2 October 1926.)

#### NATIONAL HEALTH INSURANCE.

*The Architects' and Surveyors' Approved Society.*  
26 Buckingham Gate, London, S.W.1.

#### CONTRIBUTIONS.

The contribution for men is 10d. per week, and for women 9d. per week, 5d. of which is in each case payable by the employer.

#### ORDINARY BENEFITS.

*SICKNESS BENEFIT.*—Men, after 26 contributions have been paid, 9s. weekly; after 104 contributions have been paid, 15s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly; after 104 contributions have been paid, 12s. weekly.

*DISABLEMENT BENEFIT.*—Men and women, 7s. 6d. per week, after 104 contributions have been paid.

*MATERNITY BENEFIT.*—40s. after 42 contributions have been paid.

#### ADDITIONAL BENEFITS.

*SICKNESS BENEFIT.*—Payable at the increased rates of 22s. per week for men, and 19s. for women.

*DISABLEMENT BENEFIT.*—Increased to 11s. per week for both men and women.

*MATERNITY BENEFIT.*—Increased to 54s.

*SPECIAL BENEFITS.*—Grants made to members entitled to "additional benefits" amounting to the full cost of any optical, dental, hospital or convalescent treatment, also for glasses, surgical appliances, artificial teeth, etc. Members may choose their own institutions, nursing homes or practitioners.

Further particulars and forms of application for membership may be obtained from the undersigned.

HERBERT M. ADAMSON, *Secretary.*

## Notices

### THE EIGHTH GENERAL MEETING.

The Eighth General Meeting (Business) of the Session 1925-26 will be held on Monday, 15 February 1926, 8 p.m., for the following purposes :—

To read the Minutes of the General Meeting (Ordinary) held on 1 February 1926; formally to admit members attending for the first time since their election or transfer.

To proceed with the election of the candidates whose names were published in the JOURNAL for 23 January 1926 (page 197).

To announce the names of candidates nominated by the Council for election to the various classes of membership.

To announce the Council's nomination for the Royal Gold Medal, 1926.

Mr. Herbert W. Wills [F.] has given notice that he will move the following Resolutions :—

That the Regulations for the conduct of architectural competitions be amended by the adoption of one of the two following changes (A) or (B) and the addition of Clause (C). Details to be left to the consideration of the Competitions Committee.

(A) All binding conditions should be eliminated. Instructions to competitors to take the form of suggestions which both they and the assessor may follow as they deem fit.

(B) That binding conditions be retained and that in case a competitor considers they have been ignored he shall have the right to appeal to the Competitions Committee of the Institute. In doing so he shall pay an agreed deposit to the R.I.B.A., such deposit being forfeited to the R.I.B.A. if his complaint is considered by the Competitions Committee to be unfounded. If, on the other hand, they find on investigation the complaint is justified they shall suspend the report and the award shall be quashed, a new assessor appointed by the President who shall assess the whole of the designs sent in and to whom the assessor's fee agreed upon shall be paid.

(C) Whenever architects are invited to send in applications and qualifications for selection for a limited competition, such invitation shall be advertised at least on three different dates during a period of not less than one month.

### VISIT TO MESSRS. COURTAULD'S NEW PREMISES, ST. MARTIN'S-LE-GRAND.

A visit has been arranged by the Art Standing Committee to take place on Saturday afternoon, 20 February to the above premises now approaching completion. Members desirous of taking part are requested to make early application to the Secretary R.I.B.A., 9, Conduit Street, London, W.1.

### ELECTION OF MEMBERS, 7 JUNE 1926.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that if they wish to take advantage of the election to take place on 7 June 1926



they should send the necessary nomination forms to the Secretary R.I.B.A. not later than 1 April 1926.

#### LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

#### ROOMS FOR ARBITRATIONS, ETC.

Convenient rooms for arbitrations, etc., are now available for hire at No. 28 Bedford Square, W.C.1, at a fee of £2 2s. per day. All enquiries with regard to vacant dates, etc., should be addressed to Mr. C. McArthur Butler at that address.

#### DEGREES AND DIPLOMAS OF RECOGNISED SCHOOLS.

It is notified for the information of those concerned that Members or Students of the R.I.B.A. holding a Degree or Diploma in Architecture which carries with it the privilege of exemption, on the usual conditions, from the R.I.B.A. Final Examination, may now have that distinction indicated against their names in the R.I.B.A. *Kalendar*.

Persons who desire such distinction to be recorded in the next issue of the *Kalendar* should notify the Secretary R.I.B.A. as soon as possible.

#### EXHIBITION OF ARCHITECTS' WORKING DRAWINGS.

An Exhibition of Architects' Working Drawings will be held in the R.I.B.A. Galleries from Tuesday, 16th February, to Saturday, 27th February 1926.

The Exhibition will be open daily between the hours of 10 a.m. and 8 p.m. (Saturdays 5 p.m.) and will include drawings lent by—

Mr. Thomas Hastings and Professor C. H. Reilly (Devonshire House).

Messrs. Hennell and James

(A house at Hampstead Garden Suburb).

Mr. L. Sylvester Sullivan

(Building for Courtaulds, Ltd.).

The Exhibition is intended primarily for students of Architecture; they will be able to examine the drawings of a practising architect hands to a contractor, and thus will be afforded an insight into the methods adopted in a modern architect's office.

A *Special Students' Evening* will be held at the Exhibition on Tuesday, 23rd February, 1926, at 8 p.m. All students are cordially invited to attend. It is hoped that the architects who have lent the exhibits—or their representatives—will be present in order to explain the drawings to students. Refreshments will be provided and no cards of admission are required.

## Competitions

#### BLACKPOOL MEMORIAL CLOCK TOWER.

The Corporation of Blackpool invite competitive designs for a Clock Tower with drinking fountain, to be erected in the new park. Assessor, Mr. E. Bertram Kirby, O.B.E. [F.] Designs to be sent in not later than Saturday, 13 February 1926. Conditions may be obtained from The Town Clerk, Town Hall, Blackpool, by depositing £1 1s., which will be returnable if a *bona fide* design has been submitted.

#### MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

#### PROPOSED NEW PARISH CHURCH, NEWBRIDGE, MONMOUTHSHIRE.

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members are advised to take no part in the competition.

#### COMPETITION FOR LARGER OFFICES. WEST BROMWICH PERMANENT BENEFIT BUILDING SOCIETY.

The President of the Royal Institute of British Architects has nominated Mr. W. Alexander Harvey, F.R.I.B.A., as assessor in this competition.

#### TOPSHAM PUBLIC HALL COMPETITION.

Premiums of £50, £40 and £30 respectively are offered in the above competition. Assessor, Mr. Walter Cave [F.] Last day for questions, 1 January 1926. Designs to be sent in by 1 April 1926. Conditions may be obtained from the Clerk to the Parish Council, Topsham, by depositing £1 1s.

#### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

#### LEAGUE OF NATIONS.

#### COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

#### AUSTRALIAN WAR MEMORIAL—CANBERRA.

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon, on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2

## Members' Column

MR. H. MACINTOSH [F.].

MR. HUGH MACINTOSH, F.R.I.B.A., of No. 1 Imperial Buildings, East Croydon, has now taken additional offices at 8 Princes Street, Westminster, S.W.1. Telephone: Victoria 2835.

#### PARTNERSHIP.

ARCHITECT, in old-established practice in a large provincial town, is open to consider a partnership with a young qualified Architect, who must be a first-class designer and draughtsman. Capital is not required, but applicant must be willing to work for a probationary period at a nominal salary.—Apply Box 2216, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

#### CHANGE OF ADDRESS.

THE office address of Mr. George J. J. Lacey, L.R.I.B.A., is now 12 Gray's Inn Square, W.C.1. (Telephone: Chancery 8587).

MR. O. KEITH BEATTIE [L.], has changed his address from 1 Albany Court Yard to 62 St. James's Street, S.W.

E. B. MUSMAN [A.], has changed his address from 73 Gower Street, W.C.1, to 8 Prince's Street, Westminster, S.W.1.

#### OFFICE WANTED.

F.R.I.B.A. requires small unfurnished office, preferably with use of general office. W. or W.C. district. Please state full particulars with inclusive terms.—Box 9135, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

#### OFFICE TO LET.

FELLOW offers light office S.W.1 district, £70 p.a. inclusive, lighting, heating; use of 'phone and clerical service can be arranged on mutual terms, or furnished £100 p.a.—Box 4346, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

## Minutes VII

At the Seventh General Meeting (Ordinary) of the Session 1925-1926, held on Monday, 1 February 1926, at 8.30 p.m., Mr. E. Guy Dawber, F.S.A., President, in the chair.

The attendance book was signed by 22 Fellows (including 7 members of the Council), 20 Associates (including 3 members of the Council), 8 Licentiates, 2 Hon. Associates, and a large number of visitors.

The Minutes of the Meeting held on 18 January 1926, having been published in the JOURNAL, were taken as read, confirmed, and signed as correct.

The Hon. Secretary announced the decease of:

Mr. Charles Herbert Ashworth, elected Fellow 1906.

Mr. Walter Bryan Wood, elected Associate 1881.

Mr. Francis Spence Baker, elected Associate 1892, Fellow 1901. Mr. Baker was a Past-President of the Royal Architectural Institute of Canada, and for a period of 20 years was R.I.B.A. Hon. Secretary for Canada, resigning the position at the end of last year.

And it was RESOLVED that the regrets of the Institute for their loss be entered on the Minutes, and that a message of sympathy and condolence be conveyed to their relatives.

The following members, attending for the first time since their election or transfer, were formally admitted by the President:—Mr. E. A. Fermaud [F.], Mr. John Murray [F.] (Luton), Mr. W. H. Raffles [F.], Captain B. Seymour Bailey [A.], Mr. W. B. Edwards [A.].

The President, having delivered the Annual Address to Students, a vote of thanks was passed to him by acclamation, on the motion of Sir Frank Dicksee [Hon. Associate], President of the Royal Academy, seconded by Mr. Joseph Wells, M.A. [Hon. Associate], Vice-Chancellor of the University of Oxford.

The Presentation of Prizes was then made as follows, in accordance with the Award:

*The Tite Prize: Certificate and £50.*—The Tite Certificate to Mr. A. Calvaley Cotton.

*The Owen Jones Studentship: Certificate and £100.*—The Owen Jones Certificate to Mr. Ernest Dinkel.

*The R.I.B.A. (Alfred Bosson) Studentship: A Gold Medal and £250.*—The Gold Medal and a Silver Medal to Miss Doris Lewis [A.], a Silver Medal to Mr. E. H. Ashburner.

*The Grissell Gold Medal and £50.*—The Grissell Gold Medal and a cheque for £50 to Mr. John William Wood.

*The Henry Saxon Snell Prize* (not awarded).—A cheque for £15 to Mr. Arthur E. Cameron.

*The Ashpitel Prize: Books to the value of £10.*—To Mr. Christopher Green, B.A. Oxon.

*The R.I.B.A. Silver Medal for Post-Graduate Students of Recognised Schools.*—To Miss Thelma Silcock, of Liverpool University School of Architecture.

The proceedings closed at 9.30 p.m.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

#### R.I.B.A. JOURNAL.

*Dates of Publication.*—1925: 7th, 21st November; 5th, 19th December. 1926: 9th, 23rd January; 6th, 20th February; 6th, 20th March; 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

VOL. XXXIII. No. 8

THIRD SERIES

20 FEBRUARY 1926

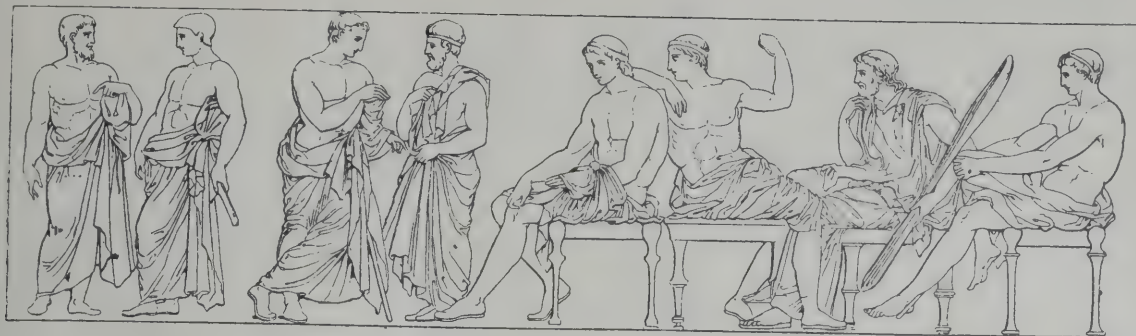
## Contents for 20 February 1926

	Page
DRAWING BY G. P. PANNINI .. .. .	<i>To face</i> 239
THE INTERNATIONAL CONGRESS ON ARCHITECTURAL EDUCATION. By the Earl of Crawford and Balcarres .. .. .	239
THE OLD INNS OF ENGLAND—Illustrated. By C. T. Tait .. .. .	241
THE WARPING OF WOOD. By Professor A. P. Laurie .. .. .	245
REVIEWS :	
OXFORD RENOWNED. By Sydney D. Kitson .. .. .	246
PRELIMINARY REPORT ON CONSETT INTERNAL IMPROVEMENT SCHEME. By W. Harding Thompson .. .. .	247
CORRESPONDENCE :	
"THE ARCHITECT AND HIS WORK." By W. H. Herbert Marten .. .. .	247
SOME PROBLEMS IN THE CONSTRUCTION OF BUILDINGS CONSIDERED EXPERIMENTALLY—Discussion .. .. .	248
THE CONDITION OF THE BUILDING INDUSTRY. By Herbert A. Welch .. .. .	253
WHAT IS GOOD AND WHAT IS BAD IN ART? .. .. .	255
ARCHITECTS' WATER-COLOUR DRAWINGS .. .. .	255
REPORT OF BUSINESS MEETING .. .. .	256
DISTRICT SURVEYORS IN LONDON .. .. .	260
ALLIED SOCIETIES :	
BERKS, BUCKS AND OXON ARCHITECTURAL ASSOCIATION .. .. .	261
THE NORFOLK AND NORWICH ASSOCIATION OF ARCHITECTS .. .. .	261
THE SOUTH WALES INSTITUTE OF ARCHITECTS .. .. .	261
OBITUARY :	
C. H. ASHWORTH .. .. .	262
W. B. WOOD .. .. .	262
AMERICAN INSTITUTE OF ARCHITECTS : 59TH CONVENTION .. .. .	263
EXHIBITION OF GARDEN DESIGNS .. .. .	263
PROFESSOR RAGNAR ÖSTBERG .. .. .	263
THE BRITISH SCHOOL AT ROME .. .. .	263
NOTICES .. .. .	264
COMPETITIONS .. .. .	266
MEMBERS' COLUMN .. .. .	267
MINUTES .. .. .	267



FROM A TINTED DRAWING BY G. P. PANNINI (1691[?]-1764)  
(R.I.B.A. Collection)





## The International Congress on Architectural Education

### • Review of the Handbook of Proceedings

BY THE EARL OF CRAWFORD AND BALCARRES [*Honorary Fellow*]

THOSE who were responsible for the International Congress on Architectural Education, held under the auspices of the Institute, ordained that the readers of papers should be chosen from architects who were not professors in the schools. Perhaps by analogy the Editor of the JOURNAL entrusts the review of the striking record of the Congress to one of the nine Honorary Fellows of the Institute who have had no architectural training at all. The layman, at any rate, often enough the culprit, though sometimes the victim of error, is profoundly concerned in the subject, and I observe with some regret how seldom the need of teaching him was referred to. The volume just issued is a fine record of a remarkable Congress—discussions and debates, exhibitions of work from no less than 52 schools all over the world—survey of the past, scrutiny of the present, aspirations for the future; the whole affair was planned on large lines, organised with excellent judgment, and was happily carried to a successful and memorable issue.

Three central themes were submitted to the Congress, past, present and future education—texts upon which significant and fruitful contributions were based. The past aroused enthusiasm among one group, tempered by cautious fear of precedent by the modernist, and openly condemned here and there by the futurists who distrust the lead hand in teaching and practice alike. And yet there is a constant recurrence of the feeling that,

even if we must break away from tradition, the old builders profited by their familiarity with materials. They handled the brick, they studied the craft in its infinite scale of variety; they seem to have maintained a standard of workmanship, and an intimacy with the manual problems of construction. "Building must be the objective of architectural training," so runs the homily of one speaker; at first sight a truism or joke, but in reality a pungent and far-seeing criticism. Another speaker said that the student should begin as a bricklayer or carpenter; again an appeal for study of the instruments with which the artist embodies his conception. We do not expect the sculptor to quarry marble, or the painter to weave canvas, but the architect can least afford to be divorced from the realities of his art.

It would seem that the old system of apprenticeship, which I suppose brought the student into close relations with workaday construction, has now died out, and the passing of a system upon which the triumphs of Mediævalism were founded still causes regret (though I am inclined to suspect the old buildings collapsed rather more often than we know). In its place we have the Schools. Let me take a reasonably insular view of the position. How is this country situated, where do our shortcomings lie, and what remedies are suggested? The U.S.A. has 5,000 students; ours number less than 700, whereas our proportion should be 2,000 or so, or in any case a much larger number than

to-day, even if we consider the smaller scale of our requirement. The merits of the school teaching were well emphasised. The teacher is presumably more eclectic than the practising architect; his province is to watch the student, to study him, and his experience should show him how to detect promise, to correct false tendencies, and to bring out the best of his pupil's personality. The teacher occupies a fiduciary rather than a financial or patronal relation with his pupil, and can combine continuity of purpose with flexibility of method, in a manner one could not expect from some distinguished practitioner with a formed style and a specialised clientele. If therefore the school is to be the recognised avenue to the profession, its development is a subject to which the Institute is wise in giving so much attention. How much more necessary is the school in architecture than in painting or music. The debased picture or the dissonant fugue are easily suppressed: architecture is neither combustible nor palpable at will; it is a much more serious affair, more lasting, and more widespread. The public should be taught to recognise the fact, the architect should welcome it; for architecture requires discipline, since it is fundamentally the public art in which the public is closely concerned: and the public should realise how deeply it is interested in the genius and personality of the teacher. I note in passing the reluctance of architects to write about architecture of our own day. I always get into trouble about my heterodoxy, but persevere.

We must therefore look upon the school as our educational unit. In this we are less susceptible to French influences than the U.S.A., or other countries which have modelled their training on the *École des Beaux Arts*. The sanity of the French system, its logic, its heritage of the *Bons Sens* of the eighteenth century have certainly invested the French method with as much unity of theory and practice, of teacher and builder, as so elaborate an organisation can attain. But one rather questions their wisdom in making all school competitions simultaneous and identical. One does not want too much insistence on *égalité* in the progress of the arts, and yet the French have this advantage over us, in that they look upon their education of the architect as in part the concurrent

education of the public. We teach our public about poetry and music, but uncommonly little about architecture. And of course this reacts on the art itself. The mischievous and maddening apathy of those who commission important buildings, the indolence which too often results in the choice of a commonplace rather than a distinguished design—all these misfortunes are debited against the architect, who gets most of the blame, and indeed must bear his share of it, for collectively he has done little to stimulate the science of appreciation among laymen. Does this over-state the case? I fear not.

The school will perhaps do something towards disseminating a better tone among the public, that is to say among potential patrons. To my mind it is satisfactory that so many of these schools should be allied with Universities, for the machine becomes more supple and efficient, the mentality better equipped to grapple with problems which are ancillary to the main function of design and construction. The school, in fact, is gradually merging itself into the wider humanistic province of University life. It has to train men in a variety of problems which no study of the past can solve—new materials and all they connote, the economic conditions of our day which are enhanced by high costs and scarcity of craftsmen, by legal and mechanical complexities, not to mention the intervention of the engineer. In old days he was a military martinet, nowadays he is different, though less remote. But while new materials involve new methods of construction, the central principles of education remain intact, and it is in the development of a few acknowledged principles that progress must be sought.

This volume provides evidence of our vitality at home, of vigorous movement elsewhere. All agree that much has got to be accomplished. Far-reaching issues are at stake. The Congress has assembled the greatest body of thoughtful and stimulating material ever collected on this vital subject. A long contest lies before us, and the full impact of this symposium should be widespread. I wish the book could be translated into French. Meanwhile the Institute has placed the public under an obligation for so cogent a statement of problems in which the public is deeply concerned.



# The Old Inns of England\*

BY C. J. TAIT [F.]

Were there ever such things as the good old days? The question is often asked. Professor Richardson and Mr. Eberlein think quite rightly that there were, or they would surely never have written this book. The road by which we have come is strewn with useful articles that we have cast aside in order that we may win the race, though what the race is for we have not time to think. We have lost our fur, our teeth, and our claws, as Dean Inge reminds us, and while mechanical production has deprived us in great measure of the use of our hands, mathematical formulæ are now seeking to do our thinking work for us.

see Mr. Pickwick making the acquaintance of Sam Weller in the yard of the White Hart, Tom Pinch journeying from Salisbury to London, Nicholas Nickleby at Grantham, with its still famous inns, the Angel and the George.

Dickens's descriptions of coaching incidents and coaching inns furnish us with the most convincing historical episodes of the times, and the present authors have not overlooked them. The inn or hostelry is one of the most human of our social institutions. It is the place where the stranger is cared for, according to its original meaning. In no Parliament House was there ever gathered such



THE EAGLE YARD, CAMBRIDGE  
(*The English Inn, Past and Present*)

The old days were brave days when results were not achieved without effort, nor indeed without adventure, and judged upon their merits they may still command our admiration. They at any rate contained the material from which romances are made. We read with a thrill of Tom Brown's first journey to Rugby. We watch him wallowing down his breakfast in the candle-lighted coffee room of the Peacock Inn, Islington, for the morning is early, and then away upon the Great North Road. We

representatives of the people as collected in the Tabard, when "longen folk to gon on pilgrimages."

It is in story and romance that the inn and its associations are enshrined, and this spirit has been well guarded by Mr. Richardson and Mr. Eberlein. But much information is also given us of historical and antiquarian interest. The development of the inn is sketched from the days when the Church dispensed the duties of magistrates and municipalities. It was a "church house" and the name is still retained at Holne, upon the moor above Ashburton, while portions of the George at St. Albans still mark the period when it was an appanage of the monastery. Dignitaries of the Church saw nothing equivocal in augmenting their receipts by the sale of

\**The English Inn, Past and Present.* By A. E. Richardson and H. D. Eberlein. B. T. Batsford, Ltd.

*The Old Inns of Kent.* By D. C. Maynard. Philip Allan & Co.



THE FRONT



THE COURTYARD, THE GEORGE, STAMFORD  
(*The English Inn, Past and Present*)



wholesome home-brew. There is a distinction between the ale-house and the inn. The functions of the former were local, but it was the business of the latter to provide a night's rest for the traveller, and thus it became a most important link in the chain of communications. Its ultimate prosperity must have owed much to those great road makers Wade and Macadam, whereby travelling became something of a pleasure as well as a necessity.

The care of the traveller, embodied in the office of host, necessarily extended itself to the care of his beast, which was the charge of the ostler. The term, despite the loss of the initial letter, implies responsibilities similar to those

as he gathered up his pair and dashed down the hill from Mount Pleasant and up the other side into Gray's Inn Lane, when it was nothing more than a lane. Coaches continued to run from some railway terminus to outlying centres as they did from Barnstaple to Lynmouth, but there can be none left upon the road now save for the purpose of excursions. The old coaching houses, whence the stages set forth upon their several roads, such as the Bull and Gate, Aldersgate Street, the Saracen's Head on Snow Hill, and the Golden Cross, where Nelson's Column stands, are now but names to conjure with.

The illustrations, which include photographs and reproductions from old prints and drawings, would alone



THE LEATHER BOTTLE, COBHAM  
(*The Old Inns of Kent*)

of his master and marks the importance attaching to this function of the hostelry. When saddle-horse, chaise and stage coach were eclipsed by the enterprise of Brunel, the stage inn became at once nothing more than a beer house or closed its doors entirely.

Among the London inns the galleried yard has departed, there being no further use for it. Many examples survived to modern times and will be remembered by some readers. The White Hart in the Borough was standing in the 'eighties and the Bell in Holborn still later. The Angel, the Nag's Head and Mother Red Cap continued to mark stages in the Metropolis, but they were stages traversed by omnibus, not by coach. There was no guard in a red coat armed with a blunderbuss. Yet in a humble way these vehicles carried on custom and tradition. Passengers could still watch the process of changing horses. Seated beside the driver, they could feel a thrill

provide an entertainment, while in conjunction with the text we feel that an adequate tribute has been paid to the modes and manners of our predecessors.

Professor Richardson's gift of enthusiasm is both known and admired. It is a gift that serves him in his search for material and in his manner of presenting it. It serves him not only in regarding the past but also the present, since it enables him to picture the inn still maintaining its position as a social institution, though the amenities of the parlour have been exchanged for those of the lounge, and the grunt of the engine, rather than the sibilations of the ostler, is heard from the yard. And so the book concludes with a list of motor routes which will enable the holiday maker to establish a personal acquaintance with these relics of a bygone time.

Professor Richardson takes to the road with something of the airs of a Claude Duval. Mr. Maynard pursues the

even tenor of his way along Watling Street, or among the hop gardens, upon an ambling pad. He is, of course, actually steering an Austin or some such machine, and the reader must contrive to reconcile the old with the new. He writes an itinerary which will be especially appreciated by the Kentish man. Whether we call the highway Watling Street, or whether we call it the Dover Road, we must recall episodes that are landmarks in our country's history. The news of Agincourt travelled along Watling Street, of Waterloo along the Dover Road. The inns, if not the buildings now standing, must be as old as the roads, and they afford the author ample material for

gossip and information. We are, of course, in the immediate environment of Dickens, and we no sooner enter Rochester than we meet Jingle. Must we accept Mr. Maynard's explanation of the sign which identifies Rochester's famous inn? To derive bull from *bulla* as in Papal-bull, while it may suggest ecclesiastical proprietorship, is to break up a happy family. I wonder what the Red Lion, the White Hart and the Spotted Dog have to say about it. The book is illustrated by photographs and pen and ink drawings by the author, which are worthy of better printing than they have received in some instances.



THE RED LION, WINGHAM  
(The Old Inns of Kent)



# The Warping of Wood

BY PROFESSOR A. P. LAURIE

BEING engaged at present in writing a book for artists, I found it necessary to go into the question of the warping of the wood panels on which pictures are painted, and, not finding any very definite information available, devised the following apparatus for testing the amount of warping of panels under different conditions.

The panels were 12 inches each way and I had a tin box made 11½ inches by 11½ inches and 4 inches deep with a broad brass flange attached around the top. I then took a sheet of rubber 14 inches each way, cut out the centre, and cemented the rubber strip on to the edge of the panel, just as one would mount a water-colour picture on to a cardboard mount. The panel with this rubber strip was then laid on the top of the box, another brass flange laid on the rubber and the two flanges pressed together with brass screw clips. The box was thus closed by a lid, the panel, the rubber margin, and the brass flange resembling a picture, mounted on a mount, and surrounded by a frame, and the wood was free to expand, contract, and warp in any direction.

Water was put inside the tin box so that the lower surface of the panel was exposed to air saturated with moisture, while the upper surface was exposed to the air of the room. After exposure for about 24 hours to moisture the panel was taken out, placed on a sheet of plate glass, and the amount of warp that had taken place measured with a steel rule. Readings with a wet and dry bulb thermometer placed above the box showed no very great change in the amount of moisture in the atmosphere during the experiments.

The first experiment was made with a white wood panel supplied by a reputable artist colourman and it may be taken as consisting of what is regarded as properly seasoned wood. The amount of warp amounted to 12 millimetres or approximately half an inch, the thickness of this panel being 5 millimetres.

The next experiment was with a mahogany panel, 3 millimetres thick, cut from a piece of mahogany which had been cut and seasoned for some three years. The amount of warp in this case amounting to 9 millimetres. As this panel was thinner and therefore should have warped more than the white wood panel, this showed superiority of the mahogany over the white wood.

The next experiment was made with a mahogany panel also 3 millimetres thick and cut from an old piece of second-hand mahogany at last twenty years old. The warp in this case only amounted to 5·5 millimetres, showing the superiority of this old mahogany and therefore the length of time that is required for a piece of wood to become thoroughly well seasoned. It is usually stated in the textbooks that the seasoning of wood is merely a matter of the drying out of sap, but I do not think this is all the story. Apparently by long exposure to air the wood cells become less sensitive to change in the moisture of the atmosphere, losing probably their hygroscopic properties.

My third experiment was made with a piece of three-ply

wood 5 millimetres thick supplied by the Venesta Company and made from Alder wood. This only warped 2½ millimetres, showing a superiority to even the old mahogany.

These experiments had been made in each case by saturating the under surface of the wood by moisture. It seemed, therefore, interesting to see what would happen when the conditions were reversed, by putting dry calcium chloride inside the box so as to expose the under surface of the panel to dry air. When this experiment was tried on the three-ply panel it warped 5·5 millimetres, showing that, with the balance of moisture which it contained, it was more sensitive to drying than it was to wetting.

The next question which I proceeded to investigate was the relation between the amount of warping and the thickness of the panel. For this purpose I had two other panels cut from the same piece of old mahogany, one 6 millimetres and the other 12 millimetres thick. The amount of warping was 3·5 millimetres and 2·5 millimetres, so that if we arrange these in order we have for the 3 millimetres thick a warp of 5·5; for the 6 millimetres thick a warp of 3·5, and for the 12 millimetres thick a warp of 2·5. It is evident that the thicker the panel the less the warping and the curvature, but it is not inversely proportional to the thickness of the panel. As a first approximation, it is probable that if  $A$  is the length of the piece of wood along the grain,  $B$  measures the total amount of contraction on one side and expansion on the other of a piece of wood of length  $A$ , and  $C$  is the thickness of the wood,

$$R \text{ the radius of curvature is } = \frac{A\sqrt{B^2+C^2}}{B}$$

$$\text{and that for a thickness } C^1, R^1 = \frac{A\sqrt{B^2+C^{12}}}{B}$$

so that

$$\frac{R}{R^1} = \frac{\sqrt{B^2+C^2}}{\sqrt{B^2+C^{12}}}$$

Consequently the ratio of the radii of curvature for different thicknesses depends on the actual amount of contraction as well as on the thickness of the panel. Assuming that a piece of wood is thoroughly seasoned it is evident that there is much less curvature in a thick panel, which confirms the mediæval practice of using a panel for even small pictures at least 1 inch thick.

Finally, to get a good comparison between ply wood and old mahogany, I tested a birch wood panel from the Venesta Company of 12 millimetres thickness. The warp in this case was only 1 millimetre.

The next question investigated was the protective value of different treatments in order to reduce warping, and for this purpose the white wood panels were used. Saturation of a panel on both sides with a weak solution of resin caused very little improvement. A panel sized and then coated on each side with one coat of Ripolene enamel, only warped 5 millimetres instead of 12 millimetres, showing the protective value of a coat of oil or varnish paint.

An interesting question here arises as to how far a coat of varnish or paint on one side is beneficial, the other side being exposed to moisture. It is quite possible that coating on one side is beneficial as it will tend to cause the wood to get evenly saturated with moisture throughout. Another of the white wood panels was therefore treated with enamel paint on one side only, and the other unprotected side exposed to moisture with the following result, that it warped 8 millimetres instead of 12 millimetres.

The apparatus is obviously capable of improvement. With a view to obtaining exact results a double box should be used so as to expose the one side of the panel to saturated air and the other to dry air, thus getting rid of the error due to the changes in the moisture of the air of the room, and a registering instrument could easily be attached so that the amount of warp could be measured without taking the panel from the double box.

It ought to be possible in an apparatus of this kind and with panels cut to a standard thickness to define the properties of different kinds of wood, and the results obtained by different methods of seasoning, so that when wood is to be used for the panelling of a room or some such similar purpose it could be purchased on a definite specification.

These experiments were carried out to get a little practical information for the artist, and do not pretend to be exhaustive, but the results seem to me of some general interest to architects, and, at any rate, they suggest a method which, if carried out on more exact lines, would, I think, give them very valuable information.

## Reviews

OXFORD RENOWNED. *By L. Rice-Oxley. Illustrated by A. B. Knapp-Fisher. Methuen. 1925.*

The quaint title of this book is justified on the title-page by an apt quotation from Shakespeare—

"I pray you let us satisfy our eyes  
With the memorials and things of fame  
That do renown this city."

The author, a resident son of Oxford, has a nice understanding of the æsthetic value of the buildings which he describes. His appreciation of the Ratcliffe Camera is delightful:

"A great building has, no doubt, a kind of personality—a personality, too, which is not shallow and obvious, but very complex and many-sided. There are times when the Camera does look very comfortable, very domestic, very like a jolly English farmer; there are times when it assumes enormous grandeur and seems to be, as it were, a presiding genius. But, whatever mood it is in, it is always dignified, never a trace about it of trickery or vulgarity or striving after effect."

Wadham, perhaps the most completely satisfying college in Oxford, is sympathetically dealt with by Mr. Rice-Oxley. He tells us that mediæval tradition was strictly followed in the lay-out of this early seventeenth-

century building, and that, therefore, the Warden's rooms were placed over the entrance gateway. They were soon moved elsewhere, as was the case in every other college, with the exception of New College. After the Warden's lodgings at Wadham were moved to the north-west corner of the quadrangle, Sir Christopher Wren occupied the room with the oriel window over the gateway.

Mr. Rice-Oxley has a kindly word for the majority of the recent buildings in Oxford: and, in a footnote to his description of the east end of Beaumont Street—that war zone of the Battle of the Styles—he says that nowadays, "whatever be the faults of modern work, architects serve art rather than archæology and do not waste their powers in a ridiculous conflict of styles."

It is forty years ago since Dean Burgon preached a sermon in New College Chapel, which was afterwards printed, largely circulated and dedicated to "The Mothers of England." This sermon laid down the axiom that "to educate young women like young men and with young men, is a thing inexpedient and immodest." A great many things have happened since then; and, among them, some very pleasant buildings have arisen for the women's colleges at Oxford. But one thing has not happened as chronicled by Mr. Rice-Oxley—usually so accurate in his designation of buildings to their respective architects—Mr. Basil Champneys did not design Girton College, Cambridge.

Buildings are not the only things treated of in this admirable guide to the enjoyment of the treasures of Oxford. The water-colour drawings of the Ashmolean Museum—perhaps the best collection outside London—are especially noticed, and many people will agree with the author when he says that he would rather have one of Turner's early water-colours than a hundred of his later.

There are some good stories about old Oxford worthies, and Max Beerbohm's description of the railway station as the last enchantment of the Middle Age in Oxford is duly recorded.

The book is illustrated by a dozen reproductions in colour, and by others in monotone from drawings by Mr. A. B. Knapp-Fisher. A photograph of Edward Pierce's bust of Sir Christopher Wren in the Ashmolean Museum is included, as is also a monotone reproduction of Peter de Wint's spacious view of "Oxford from the West," which belongs to the Delegates of the Oxford University Press. Mr. Knapp-Fisher's illustrations, always well drawn, sedate and delightfully composed, are perhaps most successful in his simpler subjects. Such a drawing as "The Jolly Farmers," with its pattern of roofs and chimneys and its low connecting shadow, is entirely satisfactory. But in the more elaborate subjects, such as "Magdalen Tower and Bridge," or "Brasenose College quadrangle and the Radcliffe Camera," he seems to fail in getting his planes aright.



The more distant buildings are as fully "detailed" as those in the foreground, and appear to the eye to be of equal importance and weight. Some allowance must be made for the effect of colour translation, which is inevitable in the reproduction of a water colour by mechanical means. Yet the monotonies are more attractive and have none of the effect of flatness possessed by some of the coloured plates. The drawing of Wadham College from the garden is a good example of Mr. Knapp-Fisher's sensitive drawing and happy composition.

SYDNEY D. KITSON [F.].

CONSETT URBAN DISTRICT COUNCIL. *Preliminary Report on Internal Improvement Scheme.* By R. Hardy-Syms, F.S.I., M.S.A.

It is generally admitted that town planning legislation in this country has up to the present been sadly deficient on two vital matters, namely, in the provision of powers for local authorities to plan built up areas, and in restricting the obligation to prepare town planning schemes only to those towns that possess 20,000 or more inhabitants. By the time that any community has reached this size, we usually find that much damage has been done, opportunities have been missed, and vested interests are strong enough to resist any civic improvements that may entail change of values.

It is interesting, therefore, to hear of a reconstruction scheme that is being carried out independently of the Act by a small industrial town of only 13,000 inhabitants—interesting, moreover, from the fact that the very core of this small town will be remodelled on generous lines to the extent that a civic centre, a market place, and an efficient system of arteries will take the place of a dreary area of mean dwellings.

The town of Consett, which is the magnetic centre of the mining communities in the north-west of the county of Durham, came into being when the Derwent Iron Company began to work ironstone in 1841. The story of its haphazard growth is a repetition of what happened in so many other spots during the industrial revolution; but, happily not too late, expert advice on its future development was obtained, and Mr. Hardy-Syms was called in as consultant; his preliminary report on an internal improvement scheme was the result. In it he diagnoses the ailments from which this little town suffers, points out the various malformations and strangled arteries that are the cause of its disease, and he outlines his proposals for an admirable reconstruction scheme, with a full knowledge of the limitations of the town's finances.

As Mr. Hardy-Syms has devoted much time to the study of road construction and arterial systems in general, it follows that his recommendations for the reorganization of the traffic plan of Consett should be the most valuable part of his report. Mindful, too, of the anticipated increase in public and private motor vehicles, he has tackled the problem of parking spaces with imagination and on an adequate scale; and his proposed layout of the new market place follows the best traditions of old provincial towns. "Through" traffic has been excluded from the market, which is conveniently adjacent to the

busy traffic junction and civic centre, and the ground levels throughout the scheme are very carefully considered. One might, however, suggest that in the final report the author should suppress one of the two competitive domes that divide one's interest between two public buildings, and which thus destroy the unity of the composition. The market place would also gain in dignity by the omission of setbacks in the flanking building. It is also questionable whether tree planting on busy pavements within twelve feet of shop fronts is altogether desirable. As the author was only called in to advise on the central portion of the town, no reference is made to the reservation of a surrounding belt for agriculture and playing fields; this will be an obviously desirable feature, in view of the town's rapid growth, and it could no doubt be acquired now by the Council at very little cost and as a commercial proposition.

The Report is well illustrated by fourteen photographs and clearly drawn diagrams, and the town of Consett is to be congratulated on the acquisition of such an excellent preliminary plan on which to work, and on the courage it shows in taking prompt steps to put that plan into execution.

W. HARDING THOMPSON [A.].

## Correspondence

"THE ARCHITECT AND HIS WORK."

50 Cookridge Street, Leeds.

12 February 1926.

The Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—“The Architect and his Work” pamphlet meets a real need.

In a general way an architect can send this to his client with his compliments, and so inform him of the correct procedure in building operations.

There is, however, only one flaw in it, in my humble opinion, which I think should be obviated in further editions—namely, the *inconsistency* of the commission fees, pages 15 and 16. I refer to the sliding scale below £2,000. This is as it ought to be, but might be made more forcible, by the reason for it being stated. The reading and argument goes well, as far as where the architect “saves his employer £1,000”—by his skill.

Let it stop there; we do not want a sliding scale on works over £5,000 to £20,000 or more, but to be consistent we ought to expect it, and many clients will exact it—because “it is reasonable in a general way.”—Yours faithfully,

W. H. HERBERT MARTEN [L.].

### THE LIBRARY.

OSTMARKBAUTEN. Statebau in einer Mittelstadt von Martin Kiessling. 4to. Stuttgart, 1925. 9s. 6d. [Julius Hoffmann.]

This book deals with modern housing in the neighbourhood of Frankfurt, and touches on all its aspects from layout to detail. Its most interesting illustrations are certainly those of architectural detail, which include some of intricate animal capitals, and some of doors, up the jambs of which crawl thin plastic plants. It is well presented and derives a distinctive appearance from the fact that some of its photographs are covered with a strong brilliance curiously like Dutch painting.

I. M. C.

# Some Problems in the Construction of Buildings Considered Experimentally

DISCUSSION ON PROFESSOR E. G. COKER'S PAPER (*See JOURNAL*, 6 February, pp. 209-225)  
(MR. ARTHUR KEEN IN THE CHAIR)

Professor E. G. COKER explained that the origin of his lecture was due to the extension of the buildings in which the gathering had met. These buildings (a part of University College) were extended about four years ago, and as they were erected on an old foundation, a good many problems arose which seemed of interest and had to be settled as they came along. He then resolved that as soon as opportunity occurred he would try and solve some of those problems for his own information, especially as they seemed to be of scientific interest, if not of practical importance. It was difficult, however, to make experiments on buildings themselves because the apparatus required was so large and the loads which had to be put upon the brickwork and masonry so tremendous. He therefore considered the question of some other way of working out the stresses for any particular load, and to this end used models of celluloid or other transparent material and subjected them to various compressions to show by means of polarised light the conditions of stress which developed. He illustrated by means of a projection polariscope how, as the load increased, the colour of the object as shown on the screen altered in the prismatic sequence, first to white, then to yellow, red, purple, and finally blue, denoting stresses of varying severity, which are followed by other sequences denoting stresses of still greater magnitude, each of which can be interpreted in numerical measure by comparison with a loaded tension or compression member.

In order to obtain these effects it was necessary to use light which vibrated in one particular plane. Ordinary light vibrated perpendicularly to the line of propagation, but in all directions around that line. If a prism were taken which would cause light to vibrate in a single plane an undulating wave was obtained which, when it penetrated any piece of transparent material, passed through it just like ordinary light. When, however, a load was applied to the material, the light broke into two wave systems, one vibrating in a direction along and the other in a direction perpendicular to the principal stress. This light emerged as a two-wave system, and in proportion to the magnitude of the stresses there was a certain lag in their relation to one another. Two waves of light in planes at right angles would have no effect upon each other, and therefore it was necessary to obtain interference by the interposition of another prism, which had the property of selecting components of these two waves in its own principal plane. The result was that the two waves which finally struggled through were in the same plane, in which case they could interfere with one another, and, on account of the lag between them, they gave on the screen a colour effect which denotes stress difference. Information as to the direction of the stress was obtained by noticing the dark bands which moved round with the

axial turning of the prism. These marked the places where the directions of principal stress were the same as the principal plane of the prism, thereby furnishing a map of the directions.

The lecturer proceeded to give various examples, which he illustrated by experiments with polarised light and by diagrammatic slides. He showed in the first instance a model of a monolithic wall and worked out the directions and magnitudes of the stresses, in the region which included the footings. The more precise measurement of the stress distribution at particular points was given on the diagrammatic slides (without the help of which it is difficult to give any intelligible idea of the various examples). The stresses were measured on many different sections and the distributions obtained were shown. The effect of projections and of their subsequent removal was exhibited. It was also pointed out how maximum stress occurred at the junction of the wall with the footing; the stress at the junction was more than twice, nearly three times, the normal stress. Longitudinal stresses measured along the centre of the wall showed that the normal stress gradually changed to a smaller amount at the footings wall, accompanied by a variable cross stress in the region of the change of cross section. Of special interest was the tracing of stresses in cases in which one was obliged to put the footing on one side only, but the lecturer explained that owing to experimental conditions this particular work was not so closely in accord with ordinary practice as in other cases.

He dealt also with the question of openings in the walls, and the tracing of the consequential stresses. Here again, owing to the conditions of the experiment, he could not use perfectly square corners, because on placing a load on them the stresses in the corners mounted up so considerably that the material became quite plastic; therefore he had rounded the corners to ease the stress and make it measurable, and, of course, this condition did not correspond to practice. He then illustrated the stress distribution resulting from a single square hole on the vertical wall. An interesting point here was that at the central cross section there was a variable compression stress with very little cross stress, so that in the case of a wall of not very great width the stress was simply a straight line following practically the straight-line law. One got with two window openings a rather more complicated pattern, and again he showed the lines of principal stresses in this arrangement and the curve of distribution. The colour values once more gave a very good picture of what was really happening.

The next question of considerable interest was that of cornices, and the effect of cornices upon stresses. It was a very interesting circumstance that if one had a wall in which there was a discontinuity of this kind, the intensity



of stress in that wall was very much greater just at the face. Where, for architectural reasons, a projection was made, that projection caused a very considerable increase of stress in the face of the wall. He showed some curves obtained by his assistant, Miss Harris, all of which had been proved to be of a very considerable order of accuracy. At the top face there was a very considerable stress, and the measurements were repeated almost exactly in the bottom face, although the projection was very unsymmetrical. The curves showed that practically any cornice, no matter of what shape, would give much the same distribution, and at about 1,500 pounds per square inch average load one would get about 2,700 pounds per square inch at the outer faces of the joints both at top and bottom as he indicated. The reason for this high intensity of stress was, he thought, quite clear. If one had an ordinary rectangular block with plane faces and it was loaded top and bottom, the block would be shortened equally all over, but with a projecting cornice the shortening of the block must necessarily be uneven and this caused an increase of stress on certain parts and especially at the face of the wall. At the conclusion of his lecture Professor Coker showed coloured lantern slides of the various models which he had prepared in case the experiments with the polarised light proved unsuccessful, but none of these were actually required.

Mr. W. E. VERNON CROMPTON [*F*]: I do not think I have ever attended a lecture which has opened up a wider range of thought. I feel that I have attended a kind of post-graduate lecture, and having used that expression I may say that I have often thought that we as architects have been backward in this matter of post-graduate education. After we have passed our examinations and have got into practice it never occurs to us to continue our studies in a serious and methodical way. It is the rarest thing to hear of any architects coming to a lecture like this in order to keep themselves in touch with what, for instance, the engineers are doing.

It is more and more necessary for us architects to keep in touch with engineers. Our civilisation is getting increasingly more complex, and it is becoming more difficult for us as architects to deal with the problems which are continually arising in respect of building construction. We can only tackle them by going hand in hand with the engineers, and asking them to help us with their specialised knowledge. But it is essential for us not to leave the matter entirely in the hands of the engineers, otherwise we ourselves will be in their hands! We must, generally speaking, know how things are going so that we may keep control, as the architect should, of the whole of the work in connection with his profession.

As I was looking at the slides this evening, Professor Richardson, who was sitting next to me, remarked how valuable all this would be in connection with the work at St. Paul's. I think that was a very illuminating remark. I really do think that we have something here which may in its further developments assist such work as is being carried on at Wren's Cathedral.

Coming to smaller matters which are under our own observation from day to day, it struck me again and again how these coloured slides throw new light upon the various defects that we are continually coming across in the

buildings upon which we have to advise and report, especially in such cases as those in which we find not only the usual crack in the window sill, but also the crack at the bottom of the jamb. It has often puzzled me why there should be a crack at the bottom of the jamb just above the window-sill. I think we have had it explained to us this evening.

This lecture puts us architects in somewhat of a difficulty. It seems to me that in order to design our buildings with the greatest safety and accuracy we have got to do without external and without internal angles! I do not know how this may be brought about, but in view of future developments in reinforced concrete—which is only yet in its infancy—it is really a question whether the arrangement of lines which we have had suggested to us this evening is not probably a wise thing for us to consider.

One further point—a point of criticism. I was surprised, in the example of the cornices, to see that there was a slight stress at the joints at the top and bottom. I should like that explained, because if the joints were in definite contact it seems to me the stress would be transferred without diminution or change, and yet as far as I interpreted the coloured slide there was a diminution of stress just at the joints, both in the stone above and in the stone below.

It is with unusual pleasure that I move the vote of thanks to Professor Coker.

Dr. OSCAR FABER [*Honorary Associate*]: I have very great pleasure in seconding the vote of thanks to Professor Coker for what has obviously been a lecture of the very greatest interest to all of us. I think perhaps we do not always realise to what extent progress is dependent on the work of the laboratory. Some of us have a kind of feeling that so long as we do enough work in actual practice we shall get to know a lot about any subject which our work covers. That is true up to a point, but the factor of safety which we have to employ in actual practice, necessary as that factor is, has the unfortunate effect of obscuring the scientific points which underlie what I may call the experiments. We put up a certain wall with a certain footing, and we find that the wall carries its load perfectly safely, and we are satisfied. We never really know whether the factor of safety on the wall is four or whether it is forty, and therefore we may make considerable errors in our calculations. It is really only in the laboratory that we are in a position to make experiments in such a way as to tell us something definite.

Professor Coker has evolved one ingenious method of making such experiments. I have also been fortunate in having a laboratory at my disposal where I have made experiments. I have rather chosen the other method of making test specimens and testing them structurally, and thus learning very accurately the present stresses of the materials I was employing. By measuring very accurately the load at which a particular structure failed I was able to arrive at a more or less exact idea of what the actual stresses were in a structure of very complicated shape. I would like to say that, apart from the very great interest of these experiments, architects, I think, are often disposed to imagine that they have a monopoly of beauty in this world; but the experiments we have seen this afternoon show that the scientist's work is also filled with beauty;

it may not be a beauty of quite the same kind, but nevertheless it is a very real and dominating beauty. One can well imagine the zest with which a man, carrying on these experiments, would continue them entirely for the intrinsic beauty of the work he is doing.

The lecturer mentioned the curious point that if you vary the section of a member carrying stress by a projection containing a sharp angle the stress in that angle will be infinite. That is a very curious point. It is perfectly true, of course, and it is a thing that can quite easily be demonstrated by very simple mathematical treatment. But I think practical people are entitled to draw certain conclusions from that. If the stress with a projection at a definitely sharp angle is infinite in that corner, and yet this member does not fail—for, of course, the structure does not fail—then the question arises, if you round that corner to a certain definite radius and you get a stress which now is by no means infinite but is very much greater than the ordinary stress, does it definitely follow that that high stress is dangerous? The infinitely high stress is proved by everyday practice not to be dangerous. Does it follow that the other stress also is dangerous?

Personally I think that these experiments do suffer from a particular defect which, I believe, applies to this method of testing, particularly when used in connection with brittle materials such as we commonly employ in our practice. To make these experiments it is necessary that you make your model of a transparent material, and I believe the material Professor Coker uses is a kind of celluloid. Celluloid has substantially the same strength in tension and compression. But the materials which we use have a compressive strength of approximately ten times the tensile strength. When you get anywhere near conditions of failure that fact alters the distribution of stresses very markedly indeed. If you take an ordinary plane concrete beam, for example, and calculate the load it ought to carry when you know its tensile stress and compressive stress you will find in practice that it will carry two or three times that load owing to the change in the distribution of stress that takes place due, again, to the great difference between the tensile and compressive stresses. You cannot make accurate experiments on the brittle materials we use in practice without taking that factor into account, and the particular specimens used in these tests do not take it into account.

Then, again, when you are dealing with structures consisting of hard blocks and softer joints, other problems arise. Take a footing of ordinary brickwork. The footing is not one monolithic structure. You are dealing with definite bricks laid in definite joints, and the yield you get in your joint does to a large extent do away with that large stress which you get in the angle. I would rather put this question in other words: if you have a definite wall, say a 14-inch wall, which would safely carry, for example, 30 tons per square foot, Professor Coker has shown that at the bottom there may be two or three times the normal stress of the footing; but can we imagine that the wall actually in practice would be very much weaker at the footing than it would be higher up? In other words, if you build a certain piece of wall 14 inches thick, and you put it into your testing machine, do you think that if you provided that wall in your testing machine with a footing it would fail at a smaller load?

That is the point I had in mind when I mentioned before that there is another method of testing these things which in some respects is superior. Personally I do not think that the wall, if provided with a footing, would fail at any smaller load. I had a very curious experience once with a concrete structure which produced a crack that I found great difficulty in explaining, but it is explained entirely by this question of projection. It was a case of a concrete pillar which had a bracket built on to it, on this bracket was resting a concrete beam, and there was an expansion joint. The beam was provided with a casting with a circular bottom, and that casting transferred its load on to another casting resting on a bracket. The stress at one point was kept down to 600 pounds per square inch, which was quite a moderate stress, and yet curiously enough every one of the stanchions and brackets so placed—there was a large number of them in the building—developed a hair crack at one particular part. I had great difficulty in explaining this. When I found it I first put a tremendous amount of reinforcement across the line of that crack, but it persisted. Eventually I saw what was happening. This inside length of concrete was acting as a strut in one direction and was subject to a stress which caused a small but definite amount of shortening. But the other piece of concrete outside was not subject to any stress, and therefore there was no tendency for that to be shortened. Consequently there was a definite tendency for this outer piece to shear on the plane. We should have avoided these cracks entirely if we had made our structure smaller and had omitted the projection. There are many cases in which the projection which you put in over and above what is necessary to carry your stress is a definite source of weakness. The redundant material will shear off, and may drop and hurt somebody. With the projection omitted the concentration of stress would not involve such a risk.

Mr. P. J. WALDRAM [L.]: In supporting the vote of thanks, I should like to say that I have a very keen recollection of some invaluable assistance that Professor Coker gave through me during the War. It was in connection with that most interesting problem, the production of steel aeroplanes, which was one of tremendous difficulty. All the nations were experiencing difficulty in the production of aeroplanes in wood, and it fell to my lot to be connected with their production in steel, a matter which, of course, had to be carried on with the most extreme secrecy. I solicited Professor Coker's assistance, and he gave it to me with both hands. Many of the problems about which we have heard this afternoon came up for discussion during the tests which he then carried out. Some of these apparently theoretical questions which may have seemed to us to-day rather remote from the actual conditions of building were then of the most intense importance. The assistance which Professor Coker gave me led to the result that the efforts of the people who were endeavouring to make steel aeroplanes quietly succeeded. At last on one memorable day in 1918 I heard that orders for aeroplanes in this country had been quadrupled.

Dr. Faber has suggested that experiments on celluloid might prove to be misleading when the results were applied to reinforced concrete. But I can certainly say that investigations of stress distribution proved on test



to be absolutely correct as regards wood, and also as regards steel. As architects we should not look too much askance at the investigation of matters which seem to be rather remote from what we consider to be practical considerations. May I strongly suggest that although some of us may not have considered the experiments shown to-day, interesting as they are, to be very closely in touch with the problems with which we have to deal, yet it is possible that we may find their practical application next door to us after all.

Incidentally it was interesting to note that the nitro-cellulose model was loaded to 587 lbs. per square inch. This was equal to no less than  $37\frac{1}{2}$  tons per square foot whilst the maximum intensity noted of 1,785 lbs. per square inch represents 114 tons per square foot. In view of the L.C.C. limit of 12 tons per square foot on concrete, these figures showed that the experimental loadings enabled very real stresses to be studied.

Mr. E. FIANDER ETHELLES: I also rise with that diffidence referred to by previous speakers, but there are still several points to which special attention should be invited.

We are sometimes advised that vertical pressures are transmitted through supporting materials at angles of dispersion of 45 degrees, and we are sometimes told of angles as great as 60 degrees from the vertical; but Professor Coker's illuminated and illuminating photographs of materials under stress did not show angles greater than 30 degrees from the vertical. Architects, engineers, builders, and others charged with the design and construction of buildings, should take note of the photographic evidence.

There is a common illusion that it is only necessary to get distributing girders long enough and each part of the girder will then support an equal share of the imposed load. The experiments shown here to-night make it plain that the greatest pressure occurs under the centre of the load, and that long, shallow distributing girders are wasteful and inefficient.

With regard to the design of floors, it is sometimes convenient to assume that the load is distributed equally over the floor, but that is not the usual method, in which floor loads occur. On parts of the office floors, for instance, there may be heavy safes or local loads due to filing cabinets. Consequently, some engineers would prefer to design panels of flooring and subsidiary beams to carry heavy concentrated loads, and then design main beams to carry distributed loads of lesser intensity.

Another point is that of the safety factor. I do wish it were possible to stop talking about a universal safety factor of four. In the case of a monolithic floor of steel and concrete, the safety factor is usually more than four, but in a steel lattice girder, it is usually much less than four. In steel the yield stress may range from 55 to 65 per cent. of the ultimate stress. Every primary stress is accompanied by secondary stresses. The real safety factor is not four, it may drop down to much nearer two. When we speak about a safety factor four, we should realise that it is often merely a *figure of speech*, and not a fact.

Mr. Vernon Crompton has spoken of St. Paul's Cathedral. It is certain that the experiments of Professor Coker would have been of the greatest use to the designer of that building. If Professor Coker could have preceded Sir

Christopher Wren, then St. Paul's Cathedral might have given us less anxiety to-day. Wren appears to have assumed that his loads would spread uniformly downwards. It was a very simple method, and the common method in vogue at that time, and it is still used by some designers to-day, but it does not always meet the facts. One of the consequences is cracks which testify to Nature's insistence upon correct theory.

I have followed Professor Coker's work for years, and I believe that succeeding generations will see his work in a fuller and wider light. I think that Professor Coker has done for his day, and in his way, what Faraday did more than a century ago. Faraday made visible the lines of force in the space which surrounds a magnet. Professor Coker has done a work as great as that. He has made visible the lines of force which act through solid material.

Architects have given us external forms which make a strong appeal by reason of their salient beauty and silent harmony, but sometimes, some of them may have regarded stresses and strains as something unreal, or merely  $x$ 's and  $y$ 's written on paper.

Professor Coker's rainbow photographs have made lines of force very real to all of us. He has brought the invisible world into the visible.

The CHAIRMAN (Mr. Arthur Keen): We are all conscious of the tremendous progress and development that has taken place in building in recent years as the result of the operations of science, in particular the work done upon the materials used in the structure and equipment of buildings. It all goes back ultimately to such work as Professor Coker has been doing. We are immensely indebted to him, and to people of his calling, for the work they do, and for the progress it enables us to make.

The vote of thanks was accorded by acclamation.

Professor COKER: I have to thank you very much indeed for all the kind expressions which have been used by the various speakers, which are fully appreciated by my colleagues and myself. It has been a very great pleasure to give this paper to the Royal Institute of British Architects. When these experiments were commenced—they have been in progress for three or four years—the idea was present in my mind that they might be of interest to the architectural profession when finished. It must not be imagined, however, that this paper is anything more than a commencement of a very extensive field of work which it is hoped will be continued. One of my colleagues, as a matter of fact, is carrying out some work of this kind on reinforced concrete, and it is hoped that something definite will arise from it in the future. One of the speakers had said that it was a very interesting job. Certainly, after the day's work, on all kinds of other things, it is very pleasant to turn into the laboratory for an hour or two and work at some scientific problem in which you take an interest. That is one of the very few advantages of being a professor.

As I hope to have the opportunity of adding to and revising these remarks before they appear in print, and time is short, no attempt will be made to deal with all the points which have been raised now, especially as some of them call for a considered reply. Dr. Faber made some very interesting remarks, but it is doubtful if he is correct in stating that the term "infinite stress" was used by me.

I thought I said "indefinite." When a material is stressed too much it goes beyond its elastic limit, and there is a redistribution in which the stresses may rise to very great magnitudes in one or more places and the material fails, but you do not get infinite stress in it. The expression is a mathematical figment, and one which I try to avoid using.

Dr. Faber also deprecated the use of a material which had much the same elastic limits in tension and compression. We are not, however, limited to such a material. Suppose for example, we wished to imitate reinforced concrete, celluloid is probably not the best material to use. Glass might be taken which is much the same kind of material as concrete in some ways. It is weak in tension and strong in compression, and it would probably represent the state of things at fracture much more faithfully than celluloid does. Indeed there are many transparent materials which it is possible to use because not only can you buy them as commercial products, but you can also make many kinds of transparent bodies up from organic substances which possess all kinds of properties different from the one which has been used here.

Dr. Faber has contributed some interesting facts in connection with the failure of a bracket projecting from a pillar, which confirm in general the results on cornices described in the present paper, and his views as to the cause of the weakness developed in the case he quotes appear to agree substantially with those in the present paper. In his view, however, the presence of soft mortar joints in walls prevent the marked increase of stress found in the experiments on models of footings. Now in a well-made wall of some age the mortar is not soft, and the argument does not really apply, while in a monolithic wall there are no joints. If, as suggested, a wall and its footing with well seasoned joints were subjected to a crushing load it seems far more likely that failure will commence at the junction with the footing than at any other place. As a matter of fact, in a brittle material like brick or stone the stress distributions we have shown you on the screen persist practically up to the fracture. Therefore I am very much inclined to think that these optical experiments represent the type of stress distribution existing at the failure of brickwork and masonry and that they afford much more information than experiments on brickwork and masonry structures tested by ordinary methods. The deductions from such experiment are often very faulty, because it is difficult to say what has really happened just at the critical stage of failure.

It is very kind of Mr. Waldram to mention the war work on which he and I were engaged years ago when aeroplane struts were of very great interest and importance and as of course they still are.

Mr. Fiander Etchells has brought forward a great many points in this discussion, but want of time prevents adequate reply now beyond thanking him for his very kind reference to the work which has been done.

It was very interesting also to hear the remarks which Mr. Etchells made about Sir Christopher Wren: Considering how rudimentary the state of knowledge of stresses was in Wren's day, St. Paul's Cathedral was a very remarkable feat of construction. It would be a great task now. We have to bear in mind the difficulties he

met with in getting proper materials, and criticisms which are often directed against him might perhaps be levelled more suitably against some of his contemporaries.

I thank you, Mr. Chairman, for your appreciative remarks, and hope, as a result of the encouragement which we have received here, that the engineering staff of this College will continue to pay attention to a field of work of which this a preliminary sketch.

The following communication has been received from Mr. G. R. Kent [L.] :—

I am very glad indeed to add my tribute of thanks to Professor Coker for the extremely interesting lecture which he has given us.

The experiments were very beautiful, and, as Mr. Etchells has said, showed us the actual strain effects inside the material itself.

It seems to me that the method devised by Professor Coker would be valuable in preliminary investigations of structural units of unusual form, for it would show the *loci* of maxima and minima principal stresses and indicate to the mathematical investigator the positions in which the greatest and least stresses were to be found.

I do not think that the experiment on the window openings could be regarded as being fairly comparable with the conditions found in actual practice. The experiment was on an homogeneous material with holes cut in it to represent window openings and the experiment showed how the material was strained in transmitting a stress past the holes.

In actual practice the material is never strictly homogeneous.

I should like to ask Professor Coker if he could prepare an experiment to show the strain in an axially loaded column, and then moving the load away from the axis and keeping it constant throughout the experiment show the change of strain due to successive eccentricities of loading.

It would be extremely valuable, too, if he could show the effect of the failure of one support in a continuous beam, and the effect of irregular loading on a similar beam, for both of these matters are of the greatest importance to those who design continuous reinforced concrete structures.

The experiments showed with startling clearness how very undesirable it is to have sharp angles, either external or internal, in any structural member under stress.

Professor Coker replies :—

I am very glad indeed to learn from Mr. G. R. Kent's letter and from other sources that optical experiments on transparent models of buildings may possibly be useful to architects in their practice. I quite agree with him, and it does not seem possible to doubt, that the experimental data discussed in my lecture with reference to window openings in nearly homogeneous material is likely to be modified when non-homogeneous material is used as in brickwork and masonry. The Paper was in fact only intended to describe the general principles of this type of investigation using the simplest types of discontinuities in buildings as illustrations. There seems to be a wide field of work for detailed experiments on models which are faithful copies of actual buildings, in which account is also taken of the want of homogeneity.



found in practice. Mr. Kent suggests that optical experiments on columns loaded eccentrically would be useful, and these are no doubt very desirable. It may be of interest to say that a limited amount of optical data on columns has been obtained here, although this has not been published on account of its fragmentary character. A brief reference occurs in a Paper published in the Proceedings of the West of Scotland Iron and Steel Institute for 1913, with some colour photographs of the stress distributions in pinned and square ends of columns, including a case of eccentric load.

A further brief reference to stresses in aeroplane struts also occurs in a Paper printed in the proceedings of the

Institution of Aeronautical Engineers for 1924. The somewhat analogous case of an eccentric load applied to a tension member is discussed in a Paper published in the *Philosophical Magazine* for October 1910.

As regards continuous beams, there would be little difficulty in measuring the stresses caused by the failure of a support or by the effect of an arbitrary system of loads upon it, although in the latter case it might be difficult to apply a number of distinct loads of, say, 50 to 100 lb. each, or else a uniform load over a small length of a model beam, and yet leave it entirely visible and accessible for measurement. There is little doubt, however, that any such cases can be dealt with successfully.

## The Condition of the Building Industry\*

BY HERBERT A. WELCH [F.].

THE general conditions of the industry and the relations between the parties representing it are, I venture to think, of such importance that I readily accepted your invitation to provide a further opportunity for the consideration of the subject with which we are so intimately associated, but regarding which we have in the past occupied a position of detachment approaching isolation.

Such discussions as we are now about to enter upon are, in my opinion, essential, particularly at the present time, providing as they do the most satisfactory means by which each of the interested parties can state its case and exchange its views. By such means only can the difficulties of the various parties be appreciated and understood, broader views formed, visions lengthened and prejudices overcome. With the fuller knowledge thereby acquired, all parties should become better qualified to give a considered opinion upon the points at issue.

It would be a dull and unresponsive mind which has yet to become conscious of the fact that in every section of industry there is to-day apparent a totally different spirit and outlook from that which existed, say, 10 to 15 years ago. In the building industry Labour has acquired an added sense of power due in part to the economic position resulting from the greater demand for its services in relation to the supply, and in part to the increased strength of the Labour Party, composed mainly of representatives of the trade unions, which has acquired the experience of government and is at present the strongest party in opposition in the House of Commons. Employers faced with the changed conditions due in part to the above causes, and in part to the much changed national and international conditions operating generally since 1914, and in addition to the less recent but by no means less important development of the system of sub-contracting, find the need for a considerable measure of adjustment, if not for an entire reorganisation of the industry, in order satisfactorily to meet these changed conditions.

The time has arrived when a decision has to be reached whether satisfactory progress can be made by the use

of the old machinery overhauled in order to make it function satisfactorily under the new conditions, or, if better results might be obtained, by scrapping at least some of the existing machinery, for the purpose of replacing it with new and more up-to-date plant. While appreciating the natural desire and inclination to build upon past experience, and the tendency to compare to-day's conditions with those of the past with a view to making them dovetail wherever possible, I consider, nevertheless, that the distant past offers us but little help towards finding a solution for present-day difficulties. Whilst we should to some extent be guided by events in the history of the industry, we must not allow ourselves to become fettered by decisions arrived at in the past under conditions which no longer exist. Let us not forget that success finally attended our efforts in the great war because at long length we realised that the old conditions of warfare had changed and that the new conditions needed new thought and new appliances, which, with the traditional adaptability of our race we embraced, and quickly made ourselves master of once we had realised the need for change.

Personally—on this occasion I speak for myself, though I am assured that my views are shared by many others—I am of the opinion that there exists at present a tendency to view the subject of the management and development of the industry from too narrow a standpoint. If the industry is properly to function under the changed conditions with which it is confronted the existing machinery must to a large extent be replaced by more up-to-date plant which will be capable of assuring more satisfactory results.

In order to appreciate the nature of these changes and conditions let us consider for a moment what were in the past and what are to-day the main component parts of the industry. In the not too distant past the industry consisted mainly of the builders, unions—not nearly of such magnitude and importance as now—architects, and a comparatively few merchants and sub-contractors, who supplied such materials and performed such work *only* as the builder and his staff were then unable with equal facility and economy themselves to supply and perform. The builder then depended, and was happy to depend, mainly upon the ability of himself and his staff satis-

\* A Paper read at a conference of Architects at Nottingham on 12 February.

factorily to carry out the work entrusted to him. To what degree do we to-day find these conditions changed? In order to prepare his estimates on a more equitable and more economical basis, the builder requires, in addition to the architect's drawings, to be supplied with a bill of quantities, prepared by a properly qualified quantity surveyor, whose services are again sought at the completion of the work for the purpose of adjusting variations. In the actual administration and supervision of the work, therefore, there appear most closely associated four parties, which, mentioned in the order of their appearance, are: architect, quantity surveyor, builder, operatives.

That, however, is but a beginning. Immediately upon the signing of the contract the builder no longer proceeds to produce by his own staff the major part of the work necessary for the completion of the structure, but architect and builder proceed to set in motion the efforts of various sub-contractors—whose callings are legion, as may be seen by the public advertisements attached to the outside of practically every building in course of erection—who at the various stages supply or "supply and fix" into position the various parts of the structure. In effect the builder has to an appreciable extent developed less along the lines of a master craftsman and more along the lines of a financier and a co-ordinator of the work of sub-contractors. In consequence of this change the number of parties interested in the industry—whose interests cannot under existing conditions be ignored—have greatly increased. Whether or not the system of sub-contracting which at present prevails is good or otherwise for the industry we are not here to-day to discuss. It might, however, on a subsequent occasion be an interesting and profitable subject for discussion. I have mentioned the matter in order very broadly and briefly to indicate to what extent the "parties interested" in the industry have multiplied during comparatively recent years.

In spite of the increase in the numbers of the parties interested we were recently told by Mr. W. H. Nicholls (past president National Federation Building Trades Employers) that the *best brains* were no longer coming into the industry. We appreciate Mr. Nicholl's frankness. Our own experience has, unfortunately, forced us to arrive at the same conclusion. But *why* are not the best brains seeking employment in the industry? Clearly because the industry offers fewer inducements than other callings. How long can this state of things be allowed to continue? Obviously we cannot longer be satisfied with second and third quality brains; but unless a move be quickly made to induce the right type of young man to follow the crafts, in due course *second or third* quality brains will cease to be available and we shall perforce have to accept what we might term mental "*Grizzles*"! It is for the industry to see to it that the conditions affecting the crafts are such that the younger men with *AI* brains will return, and return quickly, to what has ever been a traditionally high calling. It is a reflection upon the building industry that at a time of great national shortage it has been unable to cope with the public demand for houses, and at the same time tackle the normal building work necessary in other directions. True, the total demand has been abnormal, but an intelligent and en-

lightened industry should have been able so to adjust itself by this time as to render it unnecessary for the Government to insist upon calling in the engineering industry to assist in the provision of houses for the community. When referring to the building industry in this matter my remarks are intended to embrace manufacturers, merchants and others upon whom to an appreciable extent the builders depend. Had all these parties met together some five years or so ago for the purpose of giving consideration to the then changed conditions and demands, and had they remained in close consultation and co-operation in the meantime, it would appear likely that at this time the industry would have been well able to meet the public demands. In the light of recent experiences the public has a right to be assured that such a state of affairs shall not recur. I fear, however, that there are at present no clear indications that such an assurance could with confidence be given. This can, in my opinion, be done only when the active interest in the industry is placed upon wider foundations, by the admission into its councils of representatives of a greater number of the parties interested, who will thereby become more closely associated with its welfare. *Greater and wider collaboration than at present exists is essential.*

You doubtless are aware that existing agreements terminate this month, and that discussions are, and have been for some time, taking place between the employers and employees for the purpose of drawing up new agreements which will govern the industry for a further term of years. I hope—and I am sure we all hope—that these discussions will result in a satisfactory settlement of all matters outstanding, and that the industry will proceed to enjoy a long prosperity.

I do not wish to be unduly critical of the procedure which is being followed now as in the past, in respect to the discussion and formulation of these agreements, which among other matters must deal (and *should* deal with wide vision and reasonableness) with such matters as wages, hours of working, overtime, wet time, output, apprenticeship, organisation, supply of materials and other matters, some of which are admittedly best dealt with only by the two parties mentioned. I do, however, suggest in regard to a great proportion of the matters which must necessarily be considered, that the time has arrived when at least architects and surveyors should have full knowledge of matters in dispute and should be consulted before a decision has been arrived at. Enjoying as we do a very intimate knowledge of the industry, and possessing, as I suggest we do, at least the average amount of common sense and goodwill, and, moreover, by virtue of the judicial authority we are accustomed to wield between our clients and the builders, we are well qualified and equipped to contribute something toward the common good. When I had the honour recently to read a paper on this subject at the R.I.B.A., the principal representatives of the profession, employers and employees who spoke, expressed a willingness to co-operate along the lines I have indicated. We hope for and await a move in this direction.

In America during recent years considerable progress has been made along the lines of closer co-operation between those interested in the industry. There exists



in New York and several other large cities and districts, a Building Congress, the membership of which is comprised of representatives of financiers, architects, surveyors, engineers, contractors, sub-contractors, trades unions, equipment dealers, material manufacturers and the general interests, including the Press and education authorities. These Congress groups deal with apprenticeship, seasonal employment, codes, publicity, research survey, standardisation, elimination of waste and building conditions generally.

It is abundantly clear from the information to hand that much useful work has been and is being done by these bodies, and that better organisation and clearer understanding has resulted from the closer co-operation between the parties concerned.

Whether or not it is desirable in this country to proceed along similar lines needs close consideration and discussion. As a first step, however, I think that an experiment for a limited period—say, 3 years—might be made by the formation in various districts of local organisations composed of architects, quantity surveyors, builders and operatives to consider from time to time matters of importance concerning the welfare of the industry. However much conditions may vary in different localities the principle of closer co-operation and mutual understanding remains uniform. I have been requested to be brief in order to allow ample time for discussion. I will therefore conclude in the hope that you share with me a desire for the furtherance of a close co-operation between all the parties, and that you will use your best endeavours by this means to guide the industry back to the exalted position it used to occupy.

## Library Notes

LA RENAISSANCE EN FRANCE. L'architecture et la décoration par Camille Martin, Architecte. Deuxième Série. fo. Paris, n.d. £1 12s.

This is a large folio volume containing a great number of very fine photographic illustrations of Early Renaissance buildings, chiefly of the sixteenth century, including many details of ornamental portions, together with short descriptions in the text.

L. A.

HOTELS ET HOTELLERIES. By Gaston Lefol. fo. Paris [1925]. 18s. [Paris: Ch. Massin & Cie., Editeurs, 51, Rue des Écoles.]

A series of exterior and interior views and plans of modern French hotels, both large and small. Many of the plans are ingenious and suggestive, and all are interesting.

B. O.

SUGGESTIONS FOR THE STUDY OF COLOUR. By H. Barrett Carpenter. 8vo. Rochdale, 1923. 8s. 6d. [B. T. Batsford, Ltd., London.]

This little book gives a very great deal of useful information in a concise manner. Mr. Carpenter states useful facts and gives clear reasons for these. His chapters on Harmony and Contrast are good, but that on Discord is useful; also that which deals with how to avoid dirty colouring.

A. E. H.

COLOUR AND ITS APPLICATIONS. By M. Luckiesh. 8vo. New York, 1921. 25s. [D. Van Nostrand Company, New York.]

An excellent book which deals with colour scientifically and which everyone should read who has to deal with colour.

C. S.

## WHAT IS GOOD AND WHAT IS BAD IN ART ?

Sir Reginald Blomfield, in a remarkable article of criticism and of architectural exposition on recently published books on architecture, in the current *Quarterly Review*, sums up æsthetic appreciation as follows :

"In the arts there seems to be no solution of the perennial problem—who is to say what is good and what is bad in art ? The old French Academy spent year after year in the attempt to define "*le bon goût*," and one has to admit with regret that their efforts were unsuccessful. It is a problem that has vexed all thinkers since the days of Aristotle. He referred all such questions to the man of knowledge and enlightenment, and this, at least, is better than the paralysing verdict of "*quod semper quod ubique quod ab omnibus*," which seems to put a stop to any independent judgment of the past. Yet is not entirely satisfactory—the men of judgment sometimes differ, and the layman is set the further difficulty of deciding which he is to follow. For the artist himself the problem is less difficult. Every sincere artist who has studied his art and acquired his own technique inevitably builds up his own conviction as to what he is aiming at and how he is to set out to reach his ideal. However inarticulate he may be in formulating his ideals, they will be found at the back of all his work. Consciously or unconsciously, he will strive to reach certain absolute standards, and the exhortations of his critics will leave him unperturbed. My own view of architecture, both now and in the future, is that the deliberate search after originality is futile. 'The wind bloweth where it listeth.' These things will come of their own or not at all."

## ARCHITECTS' WATER-COLOUR DRAWINGS.

At Mr. W. B. Paterson's Gallery, 5 Old Bond Street, there is on view until the end of February a very charming exhibition of water-colour drawings by two well-known architects—Mr. J. J. Joass and Mr. Alexander N. Paterson, of Glasgow. Both artists are skilled in the medium, although their methods are far removed. Mr. Paterson in some aspects is the more accomplished painter, and Mr. Joass perhaps the more individual and personal. Mr. Paterson's subjects are mostly Italian—painted at Florence, Assisi, Perugia, Siena—or French, such as that admirable water-colour of the Rue de la Paix, Old Tours. He never selects his point of view from a conventional angle, and never fails to get a pictorial affect.

Mr. Joass, is content to be insular and largely to express his devotion to Dorsetshire and to the shipping and views from Poole Harbour, Corfe Castle, etc., to subtle effects of sky and the no less subtle effects of light on sea and the water of Poole Harbour, familiar to Mr. Joass as an ardent yachtsman. In some of his larger drawings (the majority of his forty-three drawings are to a small scale) one seems to find something of the quality and attitude of Thomas Girtin.

Neither the range of Mr. Paterson nor of Mr. Joass in his drawings seems to be in any way affected by the essentially more definite outlook of practice in architectural draughtsmanship.

# Eighth General Meeting (Business)

THE REGULATION OF ARCHITECTURAL COMPETITIONS

MONDAY, 15 FEBRUARY 1926

[SIR BANISTER FLETCHER (VICE-PRESIDENT) IN THE CHAIR]

The CHAIRMAN: The following notice of motion by Mr. Herbert W. Wills (Fellow), seconded by Mr. H. D. Searles-Wood (Fellow) has been received:—

That the Regulations for the Conduct of architectural competitions be amended by the adoption of one of the two following changes (a) or (b) and the addition of Clause (c). Details to be left to the consideration of the Competitions Committee.

(a) All binding conditions should be eliminated. Instructions to competitors to take the form of suggestions which both they and the assessor may follow as they deem fit.

(b) That binding conditions be retained and that in case a competitor considers they have been ignored he shall have the right to appeal to the Competitions Committee of the Institute. In doing so he shall pay an agreed deposit to the R.I.B.A., such deposit being forfeited to the R.I.B.A. if his complaint is considered by the Competitions Committee to be unfounded. If, on the other hand, they find on investigation the complaint is justified, they shall so report and the award shall be quashed, a new assessor appointed by the President who shall assess the whole of the designs sent in and to whom the assessor's fee agreed upon shall be paid.

(c) Whenever architects are invited to send in applications and qualifications for selection for a limited competition, such invitation shall be advertised at least on three different dates during a period of not less than one month.

I will call upon Mr. Wills to move the resolutions.

Mr. H. W. WILLS [F.]: It seems to me that the main cause of the trouble arising out of competitions does not come from a dispute about the assessor's judgment so much as from a dispute about his interpretation of what we call binding conditions. Here he is often faced with a dilemma. He sees a design which he believes to be the best, but that design conflicts with some of the conditions that he has laid down and made binding. I think, in a great many cases, that with the best will in the world he has wandered from the straight and narrow path, and chosen the design which he thinks best and which he thinks the promoters ought to have, and it is in these cases that trouble arises. Now, we often think that the condition is so obvious and reasonable that there can be no possible objection to it. I will take the case which often occurs in the conditions of competition—a design, let us say, must not exceed the limits of the site on which it is placed. Well, that seems a piece of common sense, but carry it out to its logical end. We will say that you have a site between two adjoining buildings, a couple of hundred feet long, and we will say that you have a condition of the competition that the sizes of all rules, all dimensions, shall be put on the plan. Now, it is quite possible through a simple error that your total dimensions might count up to a couple of feet over your 200 feet. If that happens, the binding condition is infringed, and the assessor who adhered to the straight and narrow way would have to reject it, knowing as he might do at the same time that it was by far the best design sent in, and that the error of a couple of feet in two hundred would be very easily adjusted.

I have not asked a single man to come here to support me in my resolutions. The room is not packed with my followers, it may be full of my opponents; and I do not wish to stir mud or to mention past cases; and if I do mention a very few cases that have happened in my experience, it is simply to illustrate my point and not with an idea of directing attention to these particular competitions. We had some years ago

a competition for a building in which one of the conditions laid down was that corridors in that building were to be directly lighted by windows throughout their entire length. The assessors gave their award to a design in which the corridor ran straight through the centre of the blocks, and were only lighted at the extreme ends. In that case, the competitor who adhered to the clearly laid down conditions had produced something that was put on one side, and a grave injustice was done to them. In another case (a large university building on a very fine site) there was a condition that the hall of that university should be to a certain area. Now, no one could give that area without making it a rectangular room but the award was given to a man who produced a very nice plan with a semicircular room of about two-thirds the area. There was a certain case of a big asylum competition. One of the conditions of that competition was that the asylum should be built in two portions, the first portion to contain 700 inmates, I think, and the completed building 1,200. It was a binding condition of that competition, the accommodation for each class being different from the other, that no inmates in the smaller scheme should have to use accommodation not intended for their class. In the award given every class of inmate in the smaller building had to occupy accommodation meant for another class. There was a case many years ago of public buildings required for a country town. There were police-courts, a town hall, and municipal offices. Each section was to be contained in an entirely separate building. The assessor placed first a design which placed the whole of the accommodation in one building.

I need not labour these points further, because many instances of a similar kind will occur to everybody in this room. I am speaking of facts which are often brought home to us. With regard to my first proposal, then, which I think by far the best, it is that instead of having any binding conditions in a competition, we should simply have a series of suggestions. In most cases these suggestions would be carefully followed but freedom would be given both to the competitor who thought of something better, and the assessor who came to the conclusion that it was better. Now, there is this point about conditions, and I have carefully considered it. Conditions are very difficult to draw up, and the best conditions can, in my opinion, only be drawn up after one has seen many schemes for the same building. In fact, you could draw up a perfect set of conditions after the designs were sent in but it is very difficult to draw up a perfect set of conditions before the designs are sent in.

If it should be decided that binding conditions should be maintained in a competition, I think there should be this proviso: that where a competitor complains that any binding condition is broken, he should have the right of appeal. I take the analogy of the law. We may say in speaking of law that our law is practically formed by the binding conditions of a competition. You must remember what takes place in the law. A judge is not asked to decide whether a litigant is intrinsically in the right or not, but simply whether he is right according to the law laid down. I dare say you all know the very hard conditions that have sometimes obtained where an architect has been foolish enough to carry out work which ought to have been under seal for a body, and has neglected to get a contract under seal. I know of one case which happened when my uncle, Sir Alfred Wills, was on the bench. An architect had completed drawings and carried out a school building. He had done all his work, but he had omitted to



obtain his contract under seal. The judge, in giving his decision on the subject, pointed out that he must not only lose his case, but bear the costs as well. I have heard it argued that if we set up a court of appeal, it would shake people's confidence in assessors. I do not think, if we follow the analogy of the law, that we need have the least fear. No one thinks less of a High Court judge because anyone can appeal against his decision. Nobody thinks any worse of the Court of Appeal because its decision may be disputed and taken up to the House of Lords. I do not think we need have the least fear if we set up a system of doing justice to our own profession within our own body and our own ranks. I think the confidence of the public in us would be enhanced rather than otherwise. The procedure that I propose in that case is that a competitor who has such a complaint to make should made the complaint to the Secretary of the Institute, accompanied by a substantial deposit, that the matter should then be handed to the Competitions Committee, and if the Competitions Committee found out that the complaint made was baseless, the deposit should be forfeited to the Institute, but if they found that it was substantiated, then the award should be quashed, a new assessor appointed, and the fees which would have been paid to the first assessor who had failed to carry out his work properly should be paid to the second assessor appointed. Without some such safeguard as this, it has never appeared to me to be quite fair and reasonable that an assessor's award should be taken as final and binding. It is asking us to accept the assessor as occupying a papal position, without employing any safeguard at all.

The third resolution is a very simple and short one. A competition sometimes arises for an important building in which applications are asked for from those wishing to compete, and I think it is highly important that in such cases the competition shall not be advertised once, but shall be advertised two or three times for a period of a month. It may very well happen that you are away for a fortnight, and you may not have your attention called to a competition that you would like to enter. The time is altogether too short. I think that is all I have to say.

Mr. H. D. SEARLES-WOOD [F.] : In order to permit of discussion, I formally second the resolutions.

The CHAIRMAN (to Mr. Wills) : Do you want them taken separately or together ?

Mr. WILLS : I put them separately. If (a) is passed, (b) falls to the ground ; (c) stands by itself.

Mr. W. J. H. LEVERTON [F.] : I think there are certain objections to resolution (a). If the assessor is allowed either to follow or disregard suggestions as he thinks fit, a competitor may be grievously misled. The competitor may do something in accordance with the suggestions that is against his judgment, and the assessor may afterwards throw the suggestion over and possibly select another design that may have the arrangement which the first competitor originally intended to put forward, but dropped. It is, of course, possible that a competitor may contrive an arrangement against the suggestions that may be undoubtedly the best. Mr. H. S. Statham gave an instance some years ago in a lecture before the Institute. There the competitor made what was undoubtedly the best plan, but disregarded what was a very important condition, and the assessor stuck to the conditions and consequently, although the best plan, it was lost. It might be possible to award the premiums in accordance with the conditions and afterwards select another plan for execution. You want to have the best plan for execution, but it is just possible that some other competitor might have thought of the arrangement which this man had made, but decided not to put it in his plan because it was against the conditions. The assessors, I think, might be required to be more careful in answering the questions put forward. In one important competition there were two questions : (a) whether a carriage porch was

required, and (b) whether a tower was required. The answer was that this was left to the competitors. Sometime after the competition was decided, the assessor was speaking somewhere, and it was pretty clear from what he said that he was much against carriage porches, because they darkened the entrance hall, and he was very much in favour of a tower. Designs, therefore, which included a carriage porch, or did not include a tower, would hardly get proper consideration, although these matters had been left to the competitors. Some fifteen years ago I made a suggestion in the pages of *The British Architect* that a court of appeal against assessors should be adopted, and I instanced what Mr. Wills has mentioned, that a judge's decision in the courts is often appealed against, and such appeal is considered no reflection upon a judge's ability. The opinion then came to was that the assessor's decision should be accepted for better or worse. I think we should have a court of appeal, and that it would be very dangerous to allow suggestions to be disregarded.

Mr. H. A. WELCH [F.] , in speaking on the first resolution : I should like to make it plain that my remarks are personal and not made in a representative capacity as chairman of the Competitions Committee, for the Committee has not yet had an opportunity of considering the proposals which Mr. Wills is moving to-night. With regard to resolution (a), that binding conditions should be eliminated, I feel that while this might be a highly desirable stage ultimately to reach, it is quite impossible in practice. I think there is no assessor who has been faced with the drawing up of conditions for the purpose of promoting a competition who has not found that it is incumbent upon him to make certain things abundantly clear and definite. We on the Competitions Committee have always held, however, that these definite and binding conditions should be reduced to a minimum. I quote from the Regulations and Conditions drawn up by the Institute in 1924, in which this note appears :

" It is essential in drawing up the instruction to state definitely which of the conditions must be strictly adhered to under penalty of disqualification from the competition and which of them are optional."

That is in the matter of the regulations. Coming to the question of the advice to assessors which the Institute has for many years issued, two things are stated :

" Conditions should not be imposed which tend to fetter competitors in the preparation of their schemes, so that whilst all necessary particulars are given, the intention of the promoters should, as far as possible, be put in the form of suggestions, giving competitors the fullest latitude in eliciting the best possible solution. Assessors should bear in mind that competitors are in the position of having been consulted by the promoters in order that their advice may be secured."

Then, further, while touching on this question of making certain conditions final and binding, it says that the assessors should not allow a limit of cost to be fixed unless they are satisfied that the required accommodation can be provided for the specified amount. They must induce the promoters to accept their views in this respect before agreement to adjudicate. On the one hand, we have the desire of this Institute and its Competitions Committee to reduce to a minimum anything approaching final and binding conditions ; on the other hand, there is a clear indication and acknowledgment in what I have read to you that certain things must of necessity be final and binding. I cannot conceive, for instance, any assessor being placed in the position of taking instructions from the promoter of a competition and being given an entirely free hand in the drawing up of the conditions governing that competition. He will be very clearly defined as to the site, as to certain particular ways in which the site itself is affected either by other buildings or by the claims of the public in certain particulars. He will also, no doubt, be given certain clear instructions as to the amount of cost of the new buildings which must be adhered to. He will also find, in all probability, either as an instruction or

from his own conclusions, that certain rooms or departments must of necessity, by virtue of the administration of the particular building, be placed in certain positions. And I cannot possibly conceive that the opportunity would occur to any assessor to give effect in full to this resolution (a), much as he might desire to do so. Surely every assessor would be delighted to adopt this clause if practicable. If it were possible I am sure the assessor would accept the position with both hands, but I am equally sure that he will never find himself so pleasantly placed as to be able to act in a competition in which he can issue broadcast to the intending competitors the information that conditions will not be binding. Therefore, because I consider the proposal impracticable, I would suggest that in its present form it be not accepted. I would, however, call the attention of the meeting to certain recommendations which the Competitions Committee have recently made to the Council, and upon which the Council, I believe, has voted favourably this afternoon. I read the following clause:

All assessors should be reminded "that accordingly the value and importance of drafting conditions and replies to questions so as to leave the maximum latitude to competitors in the solution of the problem should not be overlooked."

That, sir, is as far as we can go. We cannot bind the hands of every assessor who is subsequently to be appointed to conduct a competition, when, immediately he is faced by the promoters of that competition, he may find it impossible to carry out the regulations here passed.

Mr. H. V. ASHLEY [F.]: I think assessors find one great difficulty in nearly every competition in arranging with the promoters that their award shall be final and binding. When they have got over that great difficulty—and I think in the majority of cases it is a great difficulty—the assessors generally find that the promoters want certain things in their proposed buildings, and they make it quite clear that they must have those things. It seems to me that in every case an assessor must make it perfectly clear in his conditions that certain things are obligatory in a design which is to be accepted. Therefore it is quite impossible, I think, that this Institute should carry out Mr. Wills's proposals—that is to say, to have no binding conditions whatever. I take it as an aside that Mr. Wills does not refer to the binding character of the regulations governing the competition.

Mr. WILLS: I refer to the conditions as issued.

Mr. ASHLEY: I think from what Mr. Welch has said and from what I have said it will be plain that the promoters in nearly every case make certain requirements which they say are essential, and it is therefore necessary for the assessor to embody these requirements as binding.

Mr. G. H. JENKINS [F.]: I should like directly to oppose that. What Mr. Wills is trying to do is to avoid the sort of catastrophe we had the other day in a competition in the north of England. Every now and then we have cases where a competitor considers that although a very fine design has been accepted, the conditions have not been complied with. Mr. Wills's suggestion is that although the assessor and the committee have put forward their ideas of accommodation, of cost, of site, and of the placing of various rooms in a building, yet if the competitor produces something which obviously meets the conditions much better, the assessor and the committee who have appointed him—the promoters—shall not be compelled to turn down a fine design because it does not comply with some of the conditions. The conditions should be treated as suggestions, and if a competitor turns out a design which an assessor thinks is better although he has gone outside the conditions in certain directions, the competitor shall not be turned down on that account, and the other competitors shall not be given the chance of saying, "Yes, this is the finest design. We quite agree. But we could have done quite as well as this if we had not followed the conditions." As I understand the idea of a competition, it is that it should produce the finest design

for that particular building, and we do not want to have the assessor's hands tied because he happens not to have seen that final solution beforehand.

Mr. MAURICE E. WEBB [F.]: Would Mr. Wills agree to take out the question of site? We must make that a binding condition. And would not he agree that we should recommend assessors in future that binding conditions should be the absolute minimum? There must be some binding conditions. For example, competitors must be told that their drawings will have to be delivered by a certain date. You cannot have people waiting six months. There is the site again—he must stick to the site, the site must be a binding condition. You cannot go building all over the place. Will not Mr. Wills modify this resolution that, barring certain conditions as to site and so forth which must be binding, the remainder of the competition shall be left as free as it is possible to leave it? Mr. Wills has put forward this resolution in a way which makes it impossible for one to vote for it.

Mr. E. STANLEY HALL [F.]: I should like to follow Mr. Webb very closely, both in the order of speaking and in his argument. I have actually drafted an amendment as follows:

"Binding conditions should be reduced to a minimum. Instructions to competitors should as far as possible take the form of suggestions which both they and the assessors may follow as they deem fit."

People seem to forget sometimes that there is a person called the promoter in these competitions. He is an important person, who cannot be cut out altogether. After all, he foots the bill. He may say of some things, "I will not do without them." We cannot have conditions which are entirely unbinding, but I think that everybody in the Institute has one object in competitions—namely, to get the best solution of the problem, otherwise competitions are a waste of time and money. This is what the Competitions Committee and the Council have been out to do—to reduce the binding conditions to a minimum, and to leave the assessor to solve the problem in the best possible way.

The CHAIRMAN: I think that Mr. Welch has got in the instructions to the assessors something very much on the lines of Mr. Hall's amendment.

Mr. WELCH again read the passage which he had previously quoted from the advice to assessors given by the Institute: "Conditions should not be imposed which tend to fetter competitors in the preparation of their schemes," etc. He continued: That is emphasised again by the reference from the Competitions Committee to the Council this afternoon which I have also read. We on the Competitions Committee are most anxious not to hamper in any way the free operations of all those competitors who take part, but we do, by virtue of the long experience we have had, realise that the assessor never finds himself in the position of being free to do anything he likes. He has to co-operate with the promoters in these conditions long before they get to the competitors. And because of this he finds himself always bound by certain definite conditions. If the Institute were to issue an edict of the kind Mr. Wills suggests, the first assessor who had one definite condition from the promoter would say, "I cannot do this, gentlemen. I have a definite condition as to cost, or that certain rooms must not be in the basement, or that a certain department must be on the ground floor, and I cannot conduct the assessorship on the lines you now lay down. Your regulations are hopeless." That is the position. You cannot pass this as a practical proposal.

Mr. W. H. ANSELL [F.]: If the latest recommendation passed by the Council is read, I think Mr. Wills will agree we have gone as far as he himself wishes; namely, we have pressed upon assessors the desirability of eliminating, as far as possible, binding conditions—it is impossible to eliminate them altogether—and we have given to other conditions a certain elasticity.



Mr. T. R. MILBURN [*F.*] : I think it will be well to keep my remarks to the general question. With your binding conditions you must have a date. And you can't say "That the site; you can add a few acres if you like." Or if you are instructed by the promoters to have a certain number of committee-rooms you cannot say "We will add another if dozen or so." But there are a great many questions arising between an assessor and a committee before the conditions are published. As Mr. Hall says, after all, the promoter of the competition foots the bill. You have to consider him. And there are many negotiations which take place which the assessor has to be very strict about before the conditions come out. Important points arise in the negotiations between the assessor and the committee which competitors do not know anything about. He protects their interests in many ways, which sometimes is rather difficult, and the more these questions are left open the better. I agree that, as far as possible, conditions should be suggestions, and they should be largely left to the assessor after he has received the hints and instructions of the Council of this Institute and the wishes of the Competitions Committee. The discussion has been illuminating.

The CHAIRMAN : Would Mr. Wills like to reply ?

Mr. WILLS : I never proposed—I should not be so foolish as to propose—that competition conditions should contain less information than they contain at present, but simply that what we call conditions should be suggestions. When a client comes to you for a small house, he practically makes suggestions; he says he wants a couple of sitting rooms and three bedrooms. No man in his senses would immediately prepare a scheme for six sitting rooms and 20 bedrooms. The average competitor, simply because he can consider what is laid down in the instructions to be suggestions, would not dream of departing from them unless he has very good cause.

My case only covers the exceptional cases—which I should come in in certainly one competition in five, and I myself could put it higher, two in every five—where the assessor's award definitely contravenes the conditions which he himself laid down. I am sure the general attitude of both assessors and competitors would be to adhere closely to the suggestions made as to cost and as to accommodation. But attitude should be given to a man who thought the problem in a better way, and the assessor would be able to take that other way, as he very often does now. But when he does it now he does it by ignoring a condition which he himself has laid down. I told you of certain cases in point which had occurred within my own experience. I will tell you of another one. You all remember the Port of London Competition. That competition a suggestion—it was only a very strong suggestion—was made that the public spaces of all the offices could be merged into one great hall. That was a suggestion which was followed, I think, by the majority of the competitors. In the winning design, Sir Edwin Cooper took the common-sense view, and he made the Port Rates Office, which had to deal with the greatest amount of work and office, like a bank, and I do not think there was anyone in the country who did not admit that an exceedingly fine design had been sent in, and that the right award had been given. I had that strong suggestion for one large hall been in the form of a binding condition, a good deal would have been said about the Port London Competition. If a man by inadvertence, by putting down careless figures in dealing with a site 200 feet long, made it count up to 202 feet, then I say, if that was the best design submitted, the assessor should put it in, as it was simply the result of an accident, and that building should be reduced to 200 feet without detriment. In dealing with conditions I was dealing with instructions given to competitors about a building; I was not dealing with the date of building in, nor with the fact that designs have to be on paper and not on tin plates; I have not any objection to making

that binding. But in the accommodation given in buildings, in the cost and everything else, leave that loophole, make suggestions as strong as you like, and 29 out of 30 competitors will adhere to them, as they do now. But let the 30th man who can see something better have the right to take his courage in both hands and submit the design which he thinks better, and leave the assessor free from that eternal dilemma of either having to infringe his own binding conditions, or to reject a design which in his opinion and that of others is admittedly the best design sent in. I see no reason to modify my resolution in the slightest.

The CHAIRMAN : We will take a vote on that.

Mr. HALL : I had an amendment drafted, namely, "Binding conditions should be reduced to a minimum. Instructions to competitors should as far as possible take the form of suggestions which both they and the assessors may follow as they deem fit."

Mr. WALTER CAVE [*F.*] : I shall be pleased to second that.

Mr. GEORGE ELKINGTON [*F.*] : I do not think Mr. Hall's amendment meets the bill—it simply reaffirms the policy of this Institute, and in that way I do not think it would be satisfactory to Mr. Wills. The case which Mr. Wills has attempted to make out hangs on the fact that the conditions of the competition are not drawn up by this Institute, but by an assessor appointed by this Institute and the promoters of the competition, and I think what is in Mr. Wills's mind is that if we could strengthen the hands of the assessor *vis-a-vis* the promoters with whom he is dealing, we might do some useful work. And I have thought out an amendment which would embody Mr. Wills's ideas; it might commend itself to discussion afterwards. "The R.I.B.A. reaffirms its belief that the more elastic the instructions to competitors, the more likely is a satisfactory result to be obtained in any competition, and that its policy has been and is directed to that end . . . and that the assessor must make his award in strict conformity therewith." That is, that the binding conditions, once they are laid down, are equally binding on competitors and promoters. It is for us to say they would have had a better design if they had left the conditions on those matters elastic.

Mr. MILBURN : I do not like that word "elastic."

The CHAIRMAN : We must take Mr. Hall's amendment.

This was put, and was carried by 21 against 3.

On being put as a substantive motion the figures were the same.

The CHAIRMAN : Do you press your amendment, Mr. Elkington ?

Mr. ELKINGTON : No.

The CHAIRMAN : Do you want to speak about (b), Mr. Wills ?

Mr. WILLS : No, unless I am asked about it.

Mr. KEEN : We have disposed of (b) by having accepted (a) as amended.

The CHAIRMAN : In my opinion it does not dispose of (b). I ask you to deal with (b).

Mr. WILLS : I can speak very briefly on (b). As long as binding conditions referring to a proposed building exist there should be a right of appeal.

Mr. MILBURN : I think the drafter of this resolution has forgotten all about the man who is going to pay. We must consider our clients. They may not like the plan which we have chosen, and you cannot have Regulations for one side and not for the other. In any discussion which takes place on this I would like members to remember the rights of the other side.

Mr. WELCH : We cannot accept this, and on two main grounds. One is, that if it is deemed desirable—as I think it is not—that an award should be set aside if it is desirable to do so, clearly there cannot be an appeal which is open only to one side. This proposal here says that an appeal against

an assessor's award can only be made by the competitors who consider that they have suffered. If that is to be carried into law, so far as this Institute is concerned, the promoters who happened to be interested in this competition have to stand by and watch a sort of dog fight between members of this profession. On the face of it, it cannot possibly hold water. We feel that there cannot possibly be a satisfactory arrangement for any competitive system, as we understand it, if an assessor is going to be open to attack to the extent of his award being other than final and binding. That is a principle we have discussed *ad nauseam*, not only in the Competitions Committee, but in general meetings of the Institute. In (b) there is nothing to stop any three, four or five competitors in any competition subscribing between them the sum necessary to have the competition reconsidered in all its details and to hear both parties. That is not only unjustified in the face of the results of any competitive system, but you will never get a voluntary competitions committee to undertake such a task. I think Mr. Wills's proposal is unworkable and undesirable.

Mr. WILLS: Exactly the same arguments can be used, that of the Court of Appeal in Law and the House of Lords.

The SECRETARY read (b).

Mr. WELCH: Before we vote, I suggest to Mr. Wills that the vital difference between this case and that of the House of Lords is, that either party has the right of appeal, whereas in this case only one side has the right.

Mr. HALL: Who pays the assessor's second fee?

Mr. F. R. TAYLOR: In reference to this matter of appeal, in appeals to the House of Lords, all parties have a right to attend in order to state their case; and unless we have something of the kind, the appeal would not be justified.

Three voted in favour of (b), and it was declared lost.

The CHAIRMAN: Now (c), Mr. Wills.

Mr. WILLS: I have spoken for it.

The CHAIRMAN: I will just ask the Secretary to read it.

The SECRETARY (Mr. MacAlister) read the resolution.

Mr. ANSELL: May I oppose this as unnecessary? The assessors appointed by the Institute in consultation with their Committees are capable of deciding how often a competition shall be advertised, and I submit it is entirely unnecessary for this meeting to waste time to decide on details of this character.

Mr. HALL: There are many occasions when the invitations are issued before the assessor is appointed, and therefore it may be *ultra vires* for us to tell the promoters, who are inviting architects, what they are to do about the invitation.

Mr. C. F. WARD: Who will do the advertising? This is in the hands of the client, the promoter.

Mr. ASHLEY: They could not carry out this proposal.

Mr. WILLS: The promoters usually work with the assessor.

Two voted in favour of (c), and it was declared lost.

#### DISTRICT SURVEYORS IN LONDON.

The following letter was written by the late Mr. Charles Daubney a short time before his death. He took great interest in the Statutory Examination and thought that there should be more candidates for the Examination.—H. D. SEARLES-WOOD.

I do not think that sufficient attention is given by the younger members of the Institute to the Statutory Examinations under the London Building Act, 1894. That Act establishes the Royal Institute of British Architects as the authority to issue certificates qualifying holders to act as District Surveyors in London. During the last two years the entrants to the examination have been very

few and none has had the necessary qualifications to receive certificates.

The office of District Surveyor is the gift of the London County Council, who expect candidates for vacant appointments to hold the Royal Institute of British Architects Certificate. It may be that the lack of interest in these examinations is caused by an ignorance of the character of the office of District Surveyor, and of the duties, privileges and remuneration attaching thereto.

The office of District Surveyor has a very honourable tradition. It at least extends back to the time of the reconstruction of the City of London after the great fire of 1666. Prior to that there were officers in charge of buildings in the City, but by an Act of Parliament giving definite rules for the rebuilding there were established "Surveyors" whose duties form the basis of much which obtains to-day. Various Acts for developing the scope of control have since been passed by Parliament, and the original area included in the original Rebuilding Act has now been extended to the borders of the London County Council area.

The title of "Surveyor" was definitely changed to "District Surveyor" in an Act passed in the eighteenth century.

The office is a Statutory one—that is the District Surveyor obtains his authority to perform his duties direct from Act of Parliament. He has, therefore, a very large measure of independent action and he is personally responsible for the decisions he may come to. He has to enforce the rules of the Acts of Parliament which he is interested in and when necessary must himself take the necessary steps by prosecution in the Courts to secure compliance. He has the great privilege of becoming a friendly guide to architects and builders who often find it difficult to understand the full scope of the Building Acts. Notice of all building work in his District must be given to him, and he must survey the work as necessary to see that it is properly carried out. Various other duties in connection with the lay-out of streets, width of way, height and size of buildings, &c., must also be attended to.

He has to establish his own office and staff in his District and can make what suitable arrangements he chooses for carrying on his work. He meets the expenses of his office and all other outgoings.

In order that he may secure advice and guidance in his work there is in existence the District Surveyors' Association, which meets once a month, and is composed solely of existing District Surveyors.

He is debarred from engaging in private practice. During holidays, illness, &c., he may nominate as his *locum tenens* another certified surveyor.

His remuneration is derived from fees which are his personal property and which are fixed by Act of Parliament and are payable on each new building when roofed in or at the completion of each service when rendered. The amount of a fee usually varies according to the size of the building. The total remuneration depends, therefore, upon the amount of building work carried out in his district. As an illustration of the value of some districts, the London County Council have recently appointed two new District Surveyors, one to a central London District,



one a suburban District; the gross incomes from these districts last year were approximately £2,500 and £1,200 respectively.

The London County Council usually expect from candidates, in addition to the possession of the Statutory Certificate of competency to act as a District Surveyor, a practical knowledge of building work and some knowledge of the actual work of a District Surveyor's office. This latter experience can, of course, only be obtained in an existing office. There is usually an opportunity of acting as an assistant to a District Surveyor and possibly of acting as his *locum tenens*. The number of District Surveyors in London range between thirty and forty. Vacancies occur from time to time.

Any of the District Surveyors would be willing to advise an intending candidate.

The next examination for candidates wishing to obtain the Statutory Certificate will be held in October 1926, and full particulars can be obtained from the Secretary, Royal Institute of British Architects, 9 Conduit Street, W.1.

CHAS. A. DAUBNEY [F.].

## Allied Societies

### BERKS, BUCKS AND OXON ARCHITECTURAL ASSOCIATION.

The fourth annual dinner of the Association was held at the Central Café, Reading, on 27 January, Mr. H. S. Rogers, M.A., F.S.A., F.R.I.B.A., presiding. The guests included the Vice-Chancellor of Oxford, the Principal of Reading University College, Major Barnes, P.R.I.B.A., Mr. MacAlister, Secretary R.I.B.A., the President of the S. Wales Institute of Architects, the Vice-President of the Hants and Isle of Wight Association of Architects (Mr. J. Arthur Smith), the President of the Southern Counties Federation of Building Trades Employers.

Mr. J. Wells, Vice-Chancellor of Oxford University, proposing "The Town of Reading and its University," spoke of the close connection between Oxford and Reading and congratulated the town in that it was shortly to have a University. He considered that the College set an excellent example in several points of development. He hoped architects would persuade people that an old building that was serving its purpose should never be destroyed because it was out of date.

Mr. Councillor W. R. Howell in response spoke of Reading Corporation work in the construction of bridges; modern traffic making it necessary for existing bridges in the town to be widened. Mr. W. M. Childs (Principal of Reading University College), who also responded to the toast, paid eloquent tribute to Mr. J. Wells's work for the College. When they received their charter they would be a University legally and in name as well as a University they intended to maintain their standard of efficiency.

Mr. E. P. Warren (Past President of the Association), proposing "The Royal Institute of British Architects," showed how gratifying it was that architecture was becoming a prominent feature of the life of the country.

Major Harry Barnes, in responding, touched on the educational work of the Institute, and on its co-operation with allied societies. Mr. C. F. Ward (President of the South Wales Institute of Architects), replying for the Allied Societies, urged that all members of Allied Societies should belong to the Royal Institute.

Mr. Ian MacAlister (Secretary of the R.I.B.A.) gave the toast of "The Berks, Bucks and Oxon Architectural Association." He paid tribute to the past and present officers as examples of energy and loyalty to the Institute.

Mr. H. S. Rogers, in response, said they realised the geographical difficulties of the three counties and would have seriously to consider the position in the near future.

Replying to the toast "Our Guests," given by Mr. R. A. Rix, Mr. C. P. Lovell (President Southern Counties Federation of Building Trades Employers) emphasised the great need for co-operation between architects and builders.

### THE NORFOLK AND NORWICH ASSOCIATION OF ARCHITECTS.

#### ABSTRACT FROM THE REPORT OF THE COUNCIL FOR THE YEAR 1925.

The Council have pleasure in submitting to you the Fourth Annual Report of the Association.

The usual competition open to Associate Members was held, prizes being offered for measured drawings and sketches. Seven sets of drawings were received. Prizes were awarded as follows:—

E. C. Scott—1st prize.

C. J. Messent—2nd prize.

J. R. Palmer—Special Junior prize.

Your representatives in the Council of the Norwich Society have again devoted much time to the work of that Society, especially in connection with Elm Hill. A report was prepared after very careful study of the properties, and was in due course considered by the Norwich City Council. Elm Hill is unique in Norwich, if not in the Eastern Counties, and no trouble or time have been spared in the endeavour to save it. The city authorities have not yet decided on its preservation, and the issue hangs in the balance.

Arising out of this and other cases, the City Council have appointed an Ancient Buildings Committee which includes two architects, members of the Council of the Norwich Society. This committee has already done good work, and will undoubtedly prove of great value both in watching over the older architectural treasures of the city, and also in providing a clearing house for the ideas of the Preservationists on the one hand and the Iconoclasts on the other, who have each, perhaps, in the past too little appreciated the others' point of view.

The Council has been occupied with many other matters during the year, including architectural education and the discouragement of unqualified practitioners. An immense amount of architectural work is still being done by builders, sanitary inspectors and other untrained persons, and this is unfortunately being encouraged under the Government Housing Scheme. Your Council conceive it to be one of the important functions of such Associations as this to do what can be done, in the present state of the laws, to protect the public in this matter.

The following were elected officers and members of Council for 1926:—

*President*—E. T. Boardman, F.R.I.B.A.

*Vice-Presidents*—S. J. Wearing, A.R.I.B.A., J. Page, B.A., A.R.I.B.A.

*Hon. Secretary*—E. W. B. Scott, A.R.I.B.A.

*Council Members*—E. H. Buckingham, A.R.I.B.A., C. Upcher, J. Owen Bond, L.R.I.B.A.  
*Associate Member of Council*—C. L. Lister.  
*Honorary Auditor*—E. J. Tench, F.R.I.B.A.

#### THE SOUTH WALES INSTITUTE OF ARCHITECTS.

##### CENTRAL BRANCH.

A very successful new venture in the nature of a smoking concert was organised recently by the South Wales Institute of Architects (Central Branch), and held at Cardiff.

The special object of this meeting was the provision of a means of social intercourse for the members, particularly those of the Associate and Student Classes. Mr. T. Alwyn Lloyd (Chairman of the Branch) presided, and the company included Mr. C. F. Ward (Newport), President of the South Wales Institute; Mr. and Mrs. Ivor P. Jones, Mr. and Mrs. Percy Thomas, Mr. H. Teather, Mrs. T. Alwyn Lloyd, Mr. W. S. Purchon, Mr. R. H. Winder, Mr. and Mrs. A. G. Edwards (Bridgend), Mr. W. D. Thomas (Porth), Mr. and Mrs. Williamson.

The evening was so highly appreciated that it has been decided to hold similar gatherings in the future.

On Thursday, 4 February, the third of this session's series of lectures organised jointly by the South Wales Institute of Architects (Central Branch) and the Institute of Builders (South Wales Branch), was given by Mr. J. E. Barton, M.A., of Bristol. This lecture, entitled "Gothic Craftsmanship," and illustrated by a fine collection of lantern slides, was very well attended by members of both the Institute and the general public. Mr. Barton has for many years made a study of mediæval architecture.

## Obituary

CHARLES HERBERT ASHWORTH, F.R.I.B.A.,  
 F.R.I.A.I., M.I.C.E.I.

Mr. Ashworth, who died recently, was a native of Liverpool, and went to Dublin at the age of about 23 to take up a position as assistant in the office of the late Sir Thomas Deane. While with him Mr. Ashworth was engaged on the drawings of the National Museum and also acted as the clerk of works during the erection of the buildings till their completion. He was later appointed architect to the Dublin Artisans' Dwellings Company, to the duties of which office he devoted the greater part of his attention. In addition to this work Mr. Ashworth had an extensive practice in Dublin and carried out many important works. These included branch offices for the Royal Bank of Ireland, the Provincial Bank of Ireland, Bank of Ireland Stephens Green, new bakeries for Mr. Peter Kennedy, new flour mills, housing schemes, new factory and houses for Messrs. John Player and Sons, large drapery establishment and numerous commercial buildings, new warehouses for Messrs. Hugh Moore and Alexander. He was also architect to the two principal theatres, the Theatre Royal and the Gaiety Theatre.

Mr. Ashworth served for some time on the Council of the Royal Institute of Architects of Ireland.

At the beginning of 1925 he took into partnership Mr. J. Bramwell Smith, M.R.I.A.I., and the practice was carried on as Ashworth and Smith. Mr. Smith is carrying on the practice under the old name of Ashworth and Smith at the same address, 12 and 13, South William Street, Dublin.

#### WALTER BRYAN WOOD [A.]

Mr. Wood, a well-known Gloucester architect, died on 28 January, at the age of seventy-four.

Mr. Wood was a native of Lancashire, but came to Gloucestershire in the days of his youth, when his father was medical officer at a private hospital at Dowdeswell. He entered the office of Messrs. Waller and Son, architects, Gloucester, as a pupil, and subsequently became junior partner in 1882, leaving the firm in 1888.

He commenced business on his own account at 12 Queen Street, in January 1889, and built up what proved a most successful practice. Amongst the many buildings in the city and district which were built to plan submitted by him were the offices in Eastgate Street of the Gloucester Gas Light and Coke Co.; St. Andrew's Church, Churchdown; the Girls' High School, Denmark Road; Calton Road Council School; the new Council School now in course of completion at Kingsholm; St. Catharine's Church; Stroud General Hospital; office and factory for Messrs. Foster Brothers at the Gloucester Oil Mills; buildings for Messrs. Sessions and Sons at the Docks; offices of the Gloucester Conservative Beneficial Society in Bell Lane; offices for Messrs. Price Walker and Co. in Bristol Road; offices for the Stroud Brewer Co., at Stroud; and malt houses for Messrs. G. and W. E. Downing at the Docks. He was elected an Associate of the Royal Institute of British Architects in 1881.

Mr. Wood occupied a prominent position in the social and parochial life of Gloucester.

#### INSTITUTE OF PUBLIC ADMINISTRATION

A Paper will be read by Mr. G. Topham Forrest [F.A. (Architect, L.C.C.)], entitled "London One Hundred Years Hence" (illustrated by lantern slides), at Montagu House, Whitehall, S.W.1 (Headquarters of the Ministry of Labour), in Conference Room No. 9, on Thursday 25 February 1926, at 6 p.m. Chairman, Sir O. E. Warburg, O.B.E. Admission to non-members is by invitation. All enquiries should be addressed to the Hon. Secretary, I.P.A., Palace Chambers, Bridge Street S.W.1.

#### CAIRO POLYTECHNIC SCHOOL.

Mr. William W. Wood [A.] has been appointed Assistant Professor of Architectural Design at the Cairo Polytechnic School.

#### A.B.S. SCHEME OF INSURANCE.

The A.B.S. specialises in Life Assurance. In Whole Life Assurance the sum assured and bonus are payable at death and the payment of premiums normally continues throughout life. The bonuses which are usually payable with the sum assured may be surrendered for cash, applied to the reduction of future premiums or used to reduce the period over which premiums are payable. The Society is not tied to any insurance office and is prepared to offer and advise upon a wide choice of policies in leading companies. Half the initial commission is returned to the assured in the form of rebate and the other half forms a direct contribution to the Society's funds.

Please address all enquiries to the Secretary, Architects Benevolent Society, 9 Conduit Street, W.1. Telephone Mayfair 434.



# AMERICAN INSTITUTE OF ARCHITECTS' 59TH CONVENTION.

Mr. E. Guy Dawber, President, has received the following letter from Mr. D. Everett Waid, President of the American Institute of Architects :

DEAR MR. DAWBER,—The 59th Convention of the American Institute of Architects will occur in Washington, D.C., 5, 6, and 7 May 1926. We should like all members of the Royal Institute of British Architects to know that they will be as welcome to attend as our own members. Any of your members who may find it possible to be present will receive further information if they will kindly send their addresses to our Secretary, The Octagon House, Washington, D.C.

You, Mr. President, will be thrice welcome if you can pay us a visit.

With high esteem, believe me,

Faithfully yours,

D. EVERETT WAID,

*President, A.I.A.*

At the annual general meeting of the British Academy of Arts in Rome, Mr. E. Guy Dawber, President of the R.I.B.A., was elected an honorary member of the Academy.

## EXHIBITION OF GARDEN DESIGNS.

It is proposed to arrange an exhibition of drawings, plans, and photographs illustrative of garden design at the R.I.B.A. Galleries during April 1926. It is hoped that the exhibition will include designs of gardens, both old and modern, public and private, British and Continental.

The exhibition will run from 7 to 21 April 1926, and a lecture on "Garden Design" will be given by Mr. F.igo Thomas, F.S.A. on the 14 April at 5 p.m.

Members of the R.I.B.A. who have in their possession plans, photographs and drawings (measured or otherwise) which are suitable for this exhibition are invited to send them in for the consideration of the Selection Committee. The following conditions should be carefully noted :—

1. The exhibition is intended primarily to be one of garden design and planning, but illustrations of garden architecture and ornaments such as orangeries, pergolas, and statuary, may be submitted if desired.
2. Exhibits should be in reasonable good condition for exhibition purposes.
3. Photographs should be as large as possible (unless they are submitted merely to illustrate a plan) and should be mounted. They need not be framed.
4. All exhibits should be clearly marked with their title and the owner's name and address.
5. Exhibits must be addressed to the Secretary R.I.B.A., and must be received by him not later than 20 March 1926.
6. All exhibits will be insured against all risks while in the possession of the R.I.B.A.

## PROFESSOR RAGNAR ÖSTBERG.

Professor Ostberg, whose name will be submitted to H.M. the King for the Royal Gold Medal, well known for his most famous building, the Town Hall at Stockholm, attended the International Congress on Architectural Education in the summer of 1924, when many of his English confrères had the pleasure of meeting him. Among his other works in Sweden are the Östermalm School, Stockholm, the Odd-Fellows House, Kyköping, the Patent Works, and numerous private houses, Stockholm. He has been a professor at the Royal Academy of Arts, Stockholm, since 1922.

## THE BRITISH SCHOOL AT ROME.

FACULTY OF ARCHÆOLOGY, HISTORY AND LETTERS.

APPEAL FOR ADDITIONAL SUBSCRIBERS.

The following letter has been addressed to present subscribers to the school and to societies who are interested in its objects :—

50 Bedford Square,  
London, W.C.1.

DEAR SIR OR MADAM,—Twenty-five years have elapsed since the Faculty made a general appeal for funds, and the body of subscribers has been reduced to a point which makes a serious effort necessary. At present the subscription list contains nearly 200 names, including Universities and Colleges, and it is hoped that the supporters of the Faculty will do what they can to assist us in our endeavour to add to their number.

We invite you therefore to send to the hon. treasurer, 50 Bedford Square, London, W.C.1, on a postcard, the names and addresses of persons known to be interested in archæology, history and letters, or in any of the arts studied at the British School at Rome, who might be asked to subscribe to the Faculty or give it financial aid. It is hardly necessary to add that a yet more effective form of help would be to canvass such persons and to inform the treasurer that their help had already been secured or promised. There is no question that a personal canvass is worth many written appeals.

We are, yours faithfully,

ARTHUR HAMILTON SMITH, *Chairman.*

W RUSSELL, *Hon. Treasurer.*

## ROME SCHOLARSHIP IN ARCHITECTURE 1926.

The Faculty of Architecture of the British School at Rome have selected the following candidates to take part in the Final Competition for the Rome Scholarship and Henry Jarvis Studentship of 1926, offered by the Commissioners of 1851 and the Royal Institute of British Architects respectively :

- E. M. K. Ellerton, Architectural Association.
- K. E. F. Gardiner, Architectural Association.
- J. B. Wride, Cardiff Technical College.
- H. G. C. Spencely, Liverpool University.
- H. Thearle, Liverpool University.
- T. T. Wills, Liverpool University.
- J. R. Alabaster, London University.
- A. D. Connell, London University Atelier.
- B. R. Ward, London University Atelier.

## Notices

### THE NINTH GENERAL MEETING.

The Ninth General Meeting (Ordinary) of the Session 1925-26 will be held on Monday, 1 March 1926, at 8 p.m., for the following purposes:—

To read the Minutes of the General Meeting (Business) held on 15 February 1926; formally to admit members attending for the first time since their election or transfer.

To read the following paper: "The Paris Exhibition of 1925," by Lt.-Col. H. W. G. Cole, C.S.I., O.B.E.

### R.I.B.A. SESSIONAL PAPERS.

Members are requested to note that at the General Meeting on Monday, 15 March 1926, at 8 p.m., Mr. George H. Duckworth, C.B., F.S.A., will deliver a lecture entitled "The Making of a Slum."

### EXHIBITION OF ARCHITECTS' WORKING DRAWINGS.

An Exhibition of Architects' Working Drawings will be held in the R.I.B.A. Galleries from Tuesday, 16th February, to Saturday, 27th February 1926.

The Exhibition will be open daily between the hours of 10 a.m. and 8 p.m. (Saturdays 5 p.m.) and will include drawings lent by—

Mr. Thomas Hastings and Professor C. H. Reilly (Devonshire House).

Messrs. Hennell and James  
(A house at Hampstead Garden Suburb)

Mr. L. Sylvester Sullivan  
(Building for Courtaulds, Ltd.).

The Exhibition is intended primarily for students of Architecture; they will be able to examine the drawings that a practising architect hands to a contractor, and thus will be afforded an insight into the methods adopted in a modern architect's office.

A *Special Students' Evening* will be held at the Exhibition on Tuesday, 23rd February, 1926, at 8 p.m. All students are cordially invited to attend. It is hoped that the architects who have lent the exhibits—or their representatives—will be present in order to explain the drawings to students. Refreshments will be provided and no cards of admission are required.

### ELECTION OF MEMBERS.

29 MARCH 1926.

An election of members will take place at the Business General Meeting on 29 March 1926. The names and addresses of the candidates (with the names of their proposers) found by the Council to be eligible and qualified for membership according to the charter and bye-laws, and recommended by them for election, are as follows:—

#### AS FELLOWS (10)

LIVOCK: STANLEY GAGE [A. 1910], 22 Surrey Street, Strand, W.C.2, and at Norwich; Meadway, Horsell Rise, Woking. Proposed by Herbert Wigglesworth, David Barclay Niven, Professor S. D. Adshead.

MILBURN: STANLEY WAYMAN, M.C. [A. 1913], 19 Fawcett Street, Sunderland; 4 Ashmore Terrace, Sunderland proposed by R. Burns Dick, Jas. T. Cackett, W. T. Jones.

MILBURN: WILLIAM, JUNR., B.Sc., F.S.I. [A. 1910], 19 Fawcett Street, Sunderland; 23 Valebrooke Avenue, Sunderland. Proposed by R. Burns Dick, Jas. T. Cackett, W. T. Jones.

MOORE: MAJOR FREDERICK WILLIAM, D.S.O., M.C. [A. 1912] Queensgate Chambers, Bradford, and Station Buildings, Keighley; Hillside, Riddlesden, Keighley. Proposed by Wm. Illingworth, W. J. Morley, Eric Morley.

PHILLIPS: REES [A. 1913], 9 Bentinck Street, Manchester Square, W.1; 84 Hamilton Terrace, N.W.8. Proposed by A. Saxon Snell, H. P. G. Maule, Bernard Dicksee.

And the following Licentiate, who are qualified under Section IV, Clause C (ii) of the Supplemental Charter of 1925:—

BECKWITH: HENRY LANGTON, F.S.I., 3 Cook Street, Liverpool; Sandown Park, Wavertree, Liverpool. Proposed by W. Glen Dobie, E. Percy Hinde, E. Bertram Kirby.

CHADWICK: MAJOR JOHN, T.D., Bletchley, Bucks. Proposed by Walter Butler Stonebridge, Laurence K. Hall and the Council.

FAUNCH: FREDERICK GEORGE, 76 Cranbrook Road, Ilford, Essex. Proposed by the Council.

WADDINGTON: FREDERICK TURNER, 52 Abingdon Street, Blackpool; 127 Hornby Road, Blackpool. Proposed by William B. Walton, R. H. Cunliffe, Major Halstead Best.

WALSH: JOSEPH FREDERICK, F.S.I., 10 Harrison Road, Halifax; Savile Green, Halifax. Proposed by E. Marshall Wood, W. J. Morley, Eric Morley.

#### AS ASSOCIATES (33)

BLIZZARD: HENRY GEORGE [Special], 8 Elmwood, Welwyn Garden City, Herts. Proposed by H. C. Lander, Louis de Soissons, Arthur Wm. Kenyon.

BROOKFIELD: GEORGE PIERS, B.Litt.Oxon., B.Sc. (in Architecture), of the Massachusetts Institute of Technology [Exempted from Final Examination], 19 Rue de Lille, Paris, France. Proposed by Frank T. Verity, Sir Aston Webb, Maurice E. Webb.

BURTON: JOHN [Special], 71 West Parade, Mount Pleasant, Stoke-on-Trent. Proposed by Elijah Jones and the Council.

CASTELLINO: SYLVESTER JOSEPH TRINITY D'SOUZA [Special], c/o Messrs. J. A. Castellino & Co., 328 Sachapeer Street, Poona, India. Proposed by Professor A. E. Richardson, Arthur Stratton, Walter R. Jaggard.

COOMBS: ROBERT EDWIN MONTAGUE [Final], Cathedral School, Llandaff, Cardiff. Proposed by Percy Thomas, T. Alwyn Lloyd, Harry Teather.

COOPER: WILLIAM REGINALD ROYDON [Special], 17 New Street, Shrewsbury. Proposed by the Council.

CURRIE: MURDOCH [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 250 Paisley Road W., Glasgow. Proposed by Geo. And. Paterson, John Stewart, Colin Sinclair.

DANN: CLIFFORD HORACE [Final], 66 Trinity Street, Norwich. Proposed by Edw. T. Boardman, Grahame Cotman, George J. Skipper.

DOYLE: STANLEY HODGSON [Special], Calverley Chambers, Victoria Square, Leeds. Proposed by W. Carby Hall, Fred Broadbent, James Parish.

GRAY: CHARLES CLARE [Final], 81 Sutton Crescent, Walsall. Proposed by F. E. F. Bailey, A. T. Butler and the Council.

GREEN: CHRISTOPHER, B.A.Oxon. [Final], 83 Gunterstone Road, Baron's Court, W.14. Proposed by W. Curtis Green, E. Guy Dawber, Howard Robertson.



GREEN : RALSTON TILSLEY [Final], 11 Dents Road, Wandsworth Common, S.W.11. Proposed by Sir George H. Oatley, C. E. Varndell, G. C. Lawrence.

LEESLEY : THOMAS [Final], 15 Dewar Street, Dunfermline. Proposed by P. D. Hepworth, J. Ernest Franck, Sir Giles Gilbert Scott.

LEMP : CECIL GEORGE [Special], Bridge Road, Welwyn Garden City, Herts. Proposed by H. Clapham Lander, Louis de Soissons, Arthur Wm. Kenyon.

LIMBER : CHARLES FRANK, M.C. [Special], 39 Head Street, Colchester. Proposed by Alexr. G. Bond and the Council.

LIPSON : SAMUEL [Final], c/o James Miller, Esq., A.R.S.A., 15 Blythswood Square, Glasgow. Proposed by John Keppie, John Watson, James Miller.

McKEWAN : ARTHUR MALCOLM [Final], 27 Somerset Road, Handsworth Wood, Birmingham. Proposed by Herbert T. Buckland, William Haywood, James A. Swan.

MESSERT : CLAUDE JOHN WILSON [Final], 34 Mile End Road, Norwich. Proposed by George J. Skipper, Edwin J. Tench, Edw. T. Boardman.

MOORE : JOHN ROBERT [Special], 13 Acland Road, Willesden Green, N.W.2. Proposed by P. H. Thoms, J. Donald Mills, Thos. M. Cappon.

MALMER : PHILIP EVANS [Special], 25 Royal Avenue, Chelsea, S.W.3. Proposed by Edward Maufe, Austin Durst, Leslie T. Moore.

RAMOR : FRANK WILLIAM [Final], "Hillsborough," Selsdon Village, Sanderstead, Surrey. Proposed by Professor A. E. Richardson, C. Lovett Gill, Henry C. Smart.

ASHEN : JOHN HERBERT [Special], "Ujiji," Dorchester Road, Weymouth. Proposed by C. E. Varndell and the Council.

RAKER : PURUSHOTTAM MUKUND [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Harvey Road, Gamdevi, Bombay, India. Proposed by Professor A. E. Richardson, C. Lovett Gill, W. R. Jaggard.

ROUSHKINE : BARBARA [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 52 Lancaster Gate, W.2. Proposed by Walter Cave and the Council.

ROUSE : ERIC ANTHONY AMBROSE [Special], Flat 4, St. Stephen's House, St. Stephen's Square, Bayswater, W. Proposed by H. Lionel Thornely, Stanley Hamp, Charles E. Varndell.

LIPSON : DOUGLAS JAMES [Final], 51 Downs Park West, Bristol. Proposed by Sir George H. Oatley, Alfred J. Taylor, G. C. Lawrence.

THOMAS : BRYAN WILLIAM RYLANDS [Passed five years' course at Cardiff Technical College. Exempted from Final Examination after passing Examination in Professional Practice], Briar Dene, North Road, Cardiff. Proposed by T. Alwyn Lloyd, Percy Thomas, Harry Teather.

OWEN : RONALD OWEN [Final], 7 Whymark Avenue, Wood Green, N.22. Proposed by John P. Briggs, C. Stanley Peach, Harry C. H. Monson.

ATSON : EDWIN [Final], 86 Orchard Road, Erdington, Birmingham. Proposed by Edwin F. Reynolds, Herbert T. Buckland, George Drysdale.

ELSH : OLIVER MARTIN [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 38 Pattison Road, N.W.2. Proposed by Professor A. E. Richardson, C. Lovett Gill, Arthur Stratton.

ILDE : GEORGE [Final], 171 Park Road, Bolton. Proposed by John Bradshaw Gass, Arthur John Hope, Fred Thorpe.

WILFORD : CHARLES EDMUND [Special], "Wychwood," Taunton Road, Leicester. Proposed by George Nott, Frank H. Jones, Arthur Wakerley.

WINTER : PERCY HAROLD, P.A.S.I. [Special], 25 Pollards Wood Road, S.W.16. Proposed by Alfred Cox, Percy C. Boddy, Harold G. Cherry.

#### AS HON. ASSOCIATE (1)

BATSFORD : HARRY, "Hedge Bank," 25 Russell Gardens, Golders Green, N.W.11. Proposed by the Council.

### AMENDMENTS OF THE BYE-LAWS OF THE R.I.B.A.

By an Order of the Lords of His Majesty's Privy Council dated 5 February 1926, the following amendments to Bye-law 25 were approved :—

Bye-law 25 to be amended as follows :—

"25. Any charge under the preceding Bye-law 24 must be preferred in writing and signed and forwarded to the secretary, who shall lay it before the . . .," etc., as printed down to " . . . such record and publication."

"During the period of suspension the member shall not be entitled to use the title 'Chartered Architect' or the affix of the class to which he belongs, nor shall he be entitled to the use of the Library, attendance at Institute meetings or right of voting, and his name shall not be printed in the list of members in the *Kalendar* during the period of his suspension and he shall return his Diploma for such period. Before any member so suspended is reinstated the Council shall consider any further complaints as to his professional conduct during his period of suspension, and if not deemed satisfactory may decree a further period of suspension or his expulsion; in either case the above procedure of announcement and publication shall again be followed."

"Provided always . . .," etc., to end of Bye-law as printed.

### LICENTIATES AND THE FELLOWSHIP.

An examination of Licentiates desirous of qualifying for candidature as Fellows will take place on 13, 14, 15 and 16 April 1926. Application forms, to be obtained at the Secretary's Office, R.I.B.A., must be sent in on or before Saturday, 6 March, accompanied by the necessary drawings and photographs.

### R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28 Bedford Square, London, W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.

### R.I.B.A. SESSIONAL PAPERS.

On Monday, 15 March, at 8 p.m., Mr. George H. Duckworth, C.B., F.S.A., will deliver a lecture entitled "The Making of a Slum."

### R.I.B.A. PAMPHLET ON "THE ARCHITECT AND HIS WORK."

The pamphlet on "The Architect and His Work," compiled by the Practice Standing Committee with the assistance of the late Mr. Paul Waterhouse, Past President, has been issued by the Council with a view to bringing before the general public the functions of an architect and his use to the community.

Members can obtain copies of the pamphlet for circulation to their friends on application to the Secretary, at a cost of 2s. 6d. per dozen.

### ADVERTISEMENTS IN THE R.I.B.A. JOURNAL.

The attention of all members of the R.I.B.A. is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. An increase in the income derived from such advertisements is a help to the financial position of the R.I.B.A. and an advantage to all its members. The circulation of the JOURNAL is world-wide, and going, as it does, to more than 6,000 architects in almost every part of the Empire, its potential value as an advertising medium is unequalled.

## Competitions

### PROPOSED ISOLATION HOSPITAL FOR INFECTIOUS DISEASES AT DONCASTER.

The Doncaster Town Council invite architects to submit designs in competition for the Isolation Hospital for Infectious Diseases, proposed to be erected on a site off Tickhill Road and Common Lane, Doncaster. Architects competing must be established in private practice. Assessor, Mr. T. R. Milburn [F.]. Last day for questions 8 March, 1926. Designs to be sent in not later than 10 May, 1926. Premiums, £200, £100 and £75. Conditions may be obtained from the Town Clerk, Town Clerk's Office, Doncaster, by depositing £1 1s.

### COMPETITION FOR NEW OFFICES, WEST BROMWICH.

New offices for the West Bromwich Permanent Benefit Building Society. Open to architects practising within 15 miles of Birmingham. Assessor, Mr. W. Alexander Harvey [F.]. Premiums, £100, £75 and £50. Last day for designs 31 March, 1926. Conditions may be obtained from Mr. John Garbett, the Secretary, West Bromwich Permanent Benefit Building Society, 301 High Street, West Bromwich.

### DOWNHAM MARKET U.D.C. HOUSING SCHEME AND SCHEME FOR BUILDING LARGE RESIDENCES: CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competitions are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competitions.

### MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Kno, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

### TOPSHAM PUBLIC HALL COMPETITION.

Premiums of £50, £40 and £30 respectively are offered in the above competition. Assessor, Mr. Walter Cave [F.]. Last day for questions, 1 January 1926. Designs to be sent in by 1 April 1926. Conditions may be obtained from the Clerk to the Parish Council, Topsham, by depositing £1 1s.

### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

### LEAGUE OF NATIONS.

#### COMPETITION FOR THE SELECTION OF A PLAN WITH VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide the order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

### AUSTRALIAN WAR MEMORIAL—CANBERRA.

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors



are abroad may be placed on the same footing as in Australia, the conditions governing the competition will not be available in Australia until 15 August, which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon, which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

## Members' Column

### PARTNERSHIP WANTED.

R.I.B.A., young and active, desires to meet established architect with good practice. Can place capital if required. Would be willing to accept post for a period, prior to partnership. Apply Box 1126, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### JUNIOR PARTNERSHIP WANTED.

Associate, 32, with over ten years' first-class London experience, years chief assistant, wishes to purchase junior partnership in any office.—Apply Box 169, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

### CHANGE OF ADDRESS.

Mr. H. OLIVER [L.] has changed his address from No. 9 Staple Street, to No. 4 Verulam Buildings, Gray's Inn, where he has established his office in conjunction with Mr. William G. Ingram [F.].

### OFFICE TO LET.

R.I.B.A. offers large light office in W.C.2 district. Rent £75 per annum inclusive. Would also consider use of drawing office, telephone, etc.—Box 1026, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

### APPOINTMENT VACANT.

Good all-round architectural assistant required for service in Shanghai (preferably an A.R.I.B.A.), age not exceeding 28 years, married. Knowledge of quantities not essential. Three years' experience. Salary Taels 350 per month, rising to Taels 450 approximately (£600 to £800 per annum).—Apply Box 1626, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### PARTNERSHIP WANTED.

R.I.B.A. with good all-round experience, at present holding responsible position, seeks a junior partnership (with prospects), in a well-established architect.—Apply Box 1225, c/o Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

### OFFICE ACCOMMODATION.

R.I.B.A., etc., with small practice and West End office, having more work than he can cope with personally, wishes to meet architect with a view to sharing his own or another office on mutual terms.—Apply Box 1526, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

## Minutes VIII

At the Eighth General Meeting (Business) of the Session 1925-1926, held on Monday, 15 February 1926, Sir Banister Fletcher [F.], Vice-President, in the chair. The attendance book was signed by 20 Fellows (including 11 Member of the Council), 5 Associates (including 3 Members of the Council), and 13 Licentiates.

The Minutes of the meeting held on 1 February 1926, having been taken as read, were confirmed and signed by the Chairman.

The Hon. Secretary announced the decease of:

Mr. Harry Phibbs, Elected Associate 1907.

Mr. Henry Chapman, Elected Associate 1902.

And it was Resolved that the regrets of the Royal Institute for the loss of these members be recorded in the Minutes.

The following member attending for the first time since his election was formally admitted by the Chairman:

Mr. Harold Guy Holt [F.].

The following candidates for membership were elected by show of hands:

### AS FELLOWS (20).

ALLCOCK: EDWARD THOMAS [A. 1896], Loughborough.

FREAD: HORACE CHARLES [A. 1905], Esher.

GOLD: HUGH ANDREW, M.C. [A. 1913].

GOLDSMITH: MAJOR GEORGE HARTLEY, M.C. [A. 1907], St. Omer, France.

HAMPSON: JOSEPH LOUIS [A. 1910], Blackburn.

HUGHES: THOMAS HAROLD, A.R.C.A. (Arch. London), F.S.I., F.R.G.S. [A. 1911], Glasgow.

NEWMUM: ERIC GEORGE [A. 1910], Cairo.

ROBERTSON: ALEXANDER ROBERT [A. 1902].

SCOTT: ERIC WILFRID BONING [A. 1912], Norwich.

SCOTT: THEODORE GILBERT, M.C. [A. 1914], Norwich.

TAIT: THOMAS SMITH [A. 1913].

TAYLOR: SAMUEL POINTON [A. 1908].

TETLEY: CHARLES REGINALD [A. 1913], Montreal, Canada.

WESTWOOD: PERCY JAMES [A. 1904].

*And the following Licentiates, who are qualified under Section IV, Clause C (ii), of the Supplemental Charter of 1925:—*

ANDERSON: ARTHUR ERNEST, Montreal, Canada.

FINLAYSON: WILLIAM, Crieff, Perthshire.

PRITCHETT: HERBERT DEWES, Darlington.

*And the following Licentiates, who have passed the qualifying examination:—*

CLELAND: JOHN STOCKWIN, M.B.E., Pretoria, South Africa.

SUDBURY: HARRY TATHAM, Ilkeston.

THRAVES: ALFRED JOHN, Nottingham.

### AS ASSOCIATES (6).

ALI: S. AZIZ [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Hyderabad, India.

ALSOP: GEORGE HATHERLEY [Final], Melbourne, Australia.

BARNES: THOMAS SCOTT [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Morden, Surrey.

BHUTA: GOPALJI MULJI [Final], Bombay, India.

MEIKLE: EDYTH [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].

SILCOCK: FRANCES THELMA [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Huyton, Liverpool.

### AS HON. FELLOW (1).

DICKSEE: SIR FRANK, P.R.A.

## AS HON. ASSOCIATE (1).

GRIGGS : FREDERICK LANDSEER MAUR, A.R.A.

The Secretary announced that the Council had nominated for election to the various classes of membership the candidates whose names are published in this issue of the JOURNAL.

The President announced that the Council proposed to submit to His Majesty the King the name of Professor Ragnar Ostberg, Hon. Corresponding Member, of Stockholm, as a fit recipient of the Royal Gold Medal for the current year.

Mr. Herbert W. Wills [F.] moved, and Mr. H. D. Searles-Wood [F.] seconded, the following Resolutions, of which due notice had been given :

"That the Regulations for the conduct of architectural competitions be amended by the adoption of one of the two following changes (A) or (B) and the addition of Clause (C). Details to be left to the consideration of the Competitions Committee.

"(A) All binding conditions should be eliminated. Instructions to competitors to take the form of suggestions which both they and the assessor may follow as they deem fit.

"(B) That binding conditions be retained and that in case a competitor considers they have been ignored he shall have the right to appeal to the Competitions Committee of the Institute. In doing so he shall pay an agreed deposit to the R.I.B.A., such deposit being forfeited to the R.I.B.A. if his complaint is considered by the Competitions Committee to be unfounded. If, on the other hand, they find on investigation the complaint is justified, they shall so report and the award shall be quashed, a new assessor appointed by the President who shall assess the whole of the designs sent in and to whom the assessor's fee agreed upon shall be paid.

"(C) Whenever architects are invited to send in applications and qualifications for selection for a limited competition, such invitation shall be advertised at least on three different dates during a period of not less than one month."

The first resolution was discussed.

The following amendment was moved by Mr. E. Stanley Hall (Hon. Secretary), seconded, and passed by 21 votes to 3 :

"(A) Binding conditions should be reduced to a minimum. Instructions to competitors should as far as possible take the form of suggestions, which both they and the assessors may follow as they deem fit."

The amendment was then moved as a substantive resolution, seconded, and passed by 21 votes to 3.

The second resolution was discussed, put to the vote and lost by a large majority.

The third resolution was discussed, put to the vote, and lost, only one vote being recorded in its favour.

The proceedings closed at 9.15 p.m.

## NATIONAL HEALTH INSURANCE.

*The Architects' and Surveyors' Approved Society.*  
26 Buckingham Gate, London, S.W.1.

## CONTRIBUTIONS.

The contribution for men is 10d. per week, and for women 9d. per week, 5d. of which is in each case payable by the employer.

## ORDINARY BENEFITS.

SICKNESS BENEFIT.—Men, after 26 contributions have been paid, 9s. weekly ; after 104 contributions have been paid, 15s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly ; after 104 contributions have been paid, 12s. weekly.

DISABLEMENT BENEFIT.—Men and women, 7s. 6d. per week after 104 contributions have been paid.

MATERNITY BENEFIT.—40s. after 42 contributions have been paid.

## ADDITIONAL BENEFITS.

SICKNESS BENEFIT.—Payable at the increased rates of 10s. per week for men, and 19s. for women.

DISABLEMENT BENEFIT.—Increased to 11s. per week for both men and women.

MATERNITY BENEFIT.—Increased to 54s.

SPECIAL BENEFITS.—Grants made to members entitled "additional benefits" amounting to the full cost of any optical, dental, hospital or convalescent treatment, also for glass, surgical appliances, artificial teeth, etc. Members may choose their own institutions, nursing homes or practitioners.

Further particulars and forms of application for members may be obtained from the undersigned.

HERBERT M. ADAMSON, *Secretary.*

## VISIT TO ROME AND FLORENCE.

The Association of Architects, Surveyors and Technicians Assistants is organising an excursion to Rome and Florence Easter (1 to 14 April, inclusive). It is anticipated at present that the cost of travel and hotel accommodation, including allowance for service ("tips"), etc., will not exceed £13 15s. to £15 10s., according to the number of the party. This does not include meals *en route*, wine, sightseeing, etc. Members of the party while in Rome and Florence will be at liberty either to join the organised excursions or to ramble on their own.

This trip is primarily intended for those who would not likely be able to visit Rome otherwise on account of expense, but every care is being taken to ensure the comfort of the party. Any member of the Royal Institute, student or subscriber, will be welcome to join the party so long as numbers allow, and to bring his wife or members of his family with him. Immediate application for particulars should be made to Mr. Chas. McLachlan [A.], "Ouola," Upton Road, Bexley Heath, Kent.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to the method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

## LOAN LIBRARY CATALOGUE.

A new catalogue, brought up to date, of the Loan Library has recently been compiled, and can be obtained on application at the R.I.B.A., price 1s. 6d. postage 3d. extra.

## R.I.B.A. JOURNAL.

*Dates of Publication.*—1925 : 7th, 21st November ; 5th, 19th December. 1926 : 9th, 23rd January ; 6th, 20th February ; 6th, 20th March ; 10th, 24th April ; 8th, 22nd May ; 12th, 26th June ; 17th July ; 14th August ; 18th September ; 16th October.



# Journal of the Royal Institute of British Architects

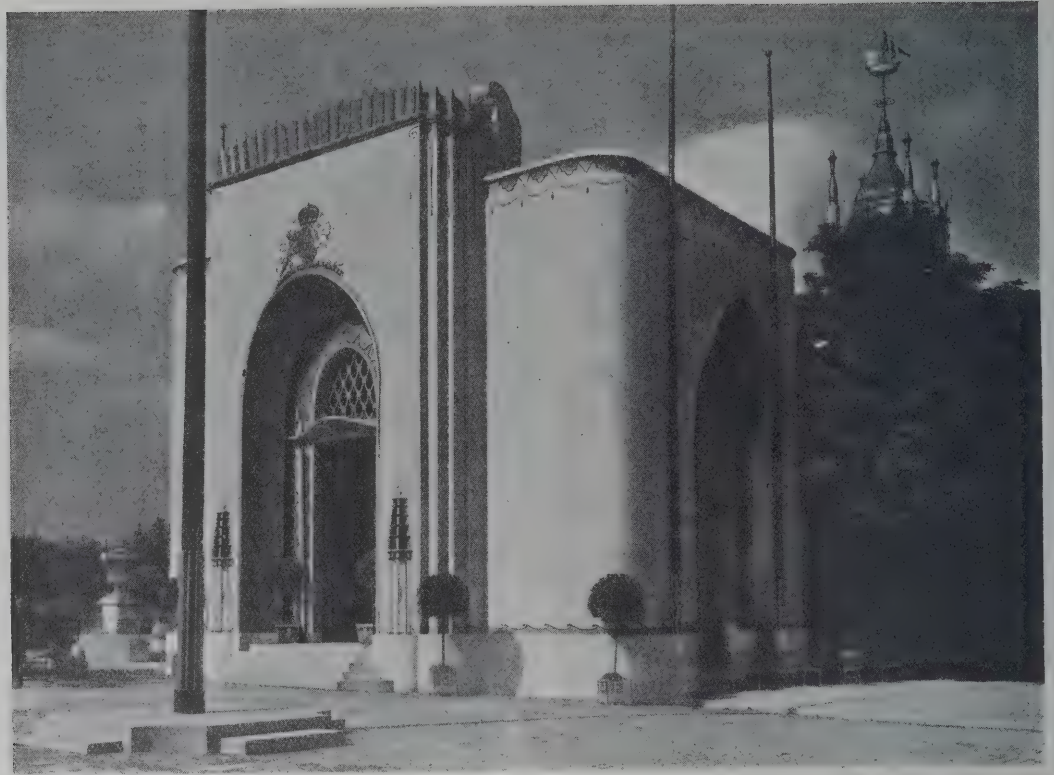
VOL. XXXIII. No. 9

THIRD SERIES

6 MARCH 1926

## Contents for 6 March 1926

	Page
FRONTISPIECE. BRITISH PAVILION, PARIS EXHIBITION .. .. .	<i>to face</i> 271
PARIS EXHIBITION OF DECORATIVE ART. By Lieut.-Colonel H. W. G. Cole, C.S.I. .. .. .	271
Discussion .. .. .	284
WREN SOCIETY PUBLICATIONS. Second Volume. By J. Alfred Gotch .. .. .	287
REVIEWS :	
DUTCH ARCHITECTURE OF THE TWENTIETH CENTURY. By C. J. Tait .. .. .	287
THE ART OF GREECE. By D. T. F. .. .. .	288
CORRESPONDENCE :	
LILLE WAR MEMORIAL. By C. F. A. Voysey .. .. .	288
REGULATION OF COMPETITIONS. By W. F. C. Holden .. .. .	288
STEEL HOUSES AND ARCHITECTS. By F. L. Jackman .. .. .	288
THE LATE ERNEST BARNSLEY. By F. W. Troup .. .. .	289
ALLIED SOCIETIES :	
NOTTINGHAM AND DERBY ARCHITECTURAL SOCIETY .. .. .	290
BIRMINGHAM ARCHITECTURAL ASSOCIATION .. .. .	290
'Who's Who in Architecture' .. .. .	290
OBITUARY :	
HENRY CHAPMAN .. .. .	291
HARRY PHIBBS .. .. .	291
R.I.B.A. VISIT TO MESSRS. COURTAULDS. By F. T. W. Goldsmith .. .. .	291
ARCHITECTS AND DIRECT LABOUR WORK .. .. .	292
NOTICES .. .. .	293
NOTES FROM THE MINUTES OF COUNCIL .. .. .	293
COMPETITIONS .. .. .	295
A.B.S. SCHEME OF INSURANCE .. .. .	296
MEMBERS' COLUMN .. .. .	296
MINUTES .. .. .	296



BRITISH PAVILION, PARIS EXHIBITION  
Messrs. Easton & Robertson, Architects.





PONT ALEXANDRE III. BRITISH PAVILION SEEN ACROSS THE SEINE

## Paris Exhibition of Decorative Art

BY LIEUT.-COLONEL H. W. G. COLE, C.S.I., O.B.E.

(Read before the Royal Institute of British Architects on Monday, 1 March 1926)

I VERY much appreciate the compliment you have paid me by giving me the opportunity to address you this evening on the subject of the recent Exhibition of Decorative Art in Paris. I crave your indulgence on two grounds, firstly, that I have no technical knowledge, from an architectural standpoint, of my subject, and, secondly, that this is the first occasion that I have ever given a lecture.

I do not suppose that very many of those present had the opportunity of visiting the Exhibition, and this is my excuse for explaining its position in regard to Paris as a whole, and some details of the general lay-out and the methods adopted in its organisation. In the first place, the site is unique—right in the heart of Paris. The whole of the Grand Palais, which in a way is equivalent to the Royal Academy and Olympia rolled into one, was occupied and the site extended right up to the Invalides and along the Seine on each bank. So not only was the site as central as the Green Park, but was as if the Green Park was intersected by the River Thames.

There were no less than 16 entrances to the Exhibition and the connections by rail, underground, tram and bus services were ideal. People went into the Exhibition just in the same way as they might go into the park or down Regent Street; there was no need to make an expedition and to depart and return at certain fixed hours. Financially the Exhibition was a complete success, and the final accounts, it is said, will show a profit of some £150,000. The funds were raised by means of bonds or, in other words, lotteries: comparatively few prizes, but of sufficiently high value to attract the gambler who, even though he lost, was able to get a wad of free tickets for the use of himself and his family.

Quite apart from the direct financial gain, Paris as a whole benefited enormously by the holding of the Exhibition: every hotel was taxed to its utmost capacity even during the usually slack months of August and early September, and the indirect benefits to the trade and general prosperity of the gayest capital in the world were substantial.

The underlying principle of the whole scheme

was that everything shown should be of novel inspiration and design. The committees appointed to assist in the organisation of the British Section, under the Presidency of His Royal Highness Prince Arthur of Connaught, took a good deal of trouble in finding a form of words which were suited to these ideas and, at the same time, sufficiently explicit for an exhibitor. We all know the old adage that there is nothing new under the sun, and the truth of this was abundantly shown at Paris. A delightful explanation of the required form of newness was given me by a brilliant Frenchman of European reputation—a recognised expert in all art matters. He said, "You will be perfectly safe to accept stuff drawn from sources more than 1,000 years old. Between 500 and 1,000 years you had better ask me in case of doubt, but you never would be so foolish as to look at anything newer than 500." And so it certainly was as regards much of the architecture. The one outstanding success of the Exhibition, so successful indeed that I am not conscious of hearing one single adverse criticism, was Letrosne's treatment of the Central Hall in the Grand Palais, and this, if anything, was Babylonian. Again, Plumet's four great towers, clearly of Eastern inspiration, would not have been out of place in a Mogul capital. In these days, when simplicity has to be the order of the day, flat surfaces and simple blocks gave the general impression of primitiveness and added to the sense that one was living in the past rather than in the future. I hope that throughout my remarks it will be realised that any criticism of or comments on purely technical features of the Exhibition, apart from the art of showmanship and representation, are those which I gathered from qualified sources and not my personal opinion, which must be quite valueless.

As regards decoration, there was the same tendency to simplicity, flat surfaces, greys and dove colour predominating. With the exception of marbles and ironwork the required effects were produced by the skilful use of plaster, appropriately finished, spread on any inexpensive medium. The display of marbles in the French Section—all of it drawn from French territories—was extremely beautiful and varied. Again, the superb ironwork of Brandt and others was considered to mark something more than a passing phase and to present something really new in design, execution and technique.

From the illustrations can be seen the passing, let us hope for ever, of the old type of exhibition with its florid cornucopic exuberance, its wealth of torsae—(or whatever may be the feminine of torso)—and that fruity richness so easily obtained by squeezing an icing tube on a wedding cake. On the other hand, one was painfully conscious at times of striving after something barbaric and very crude for the sake of catching attention.

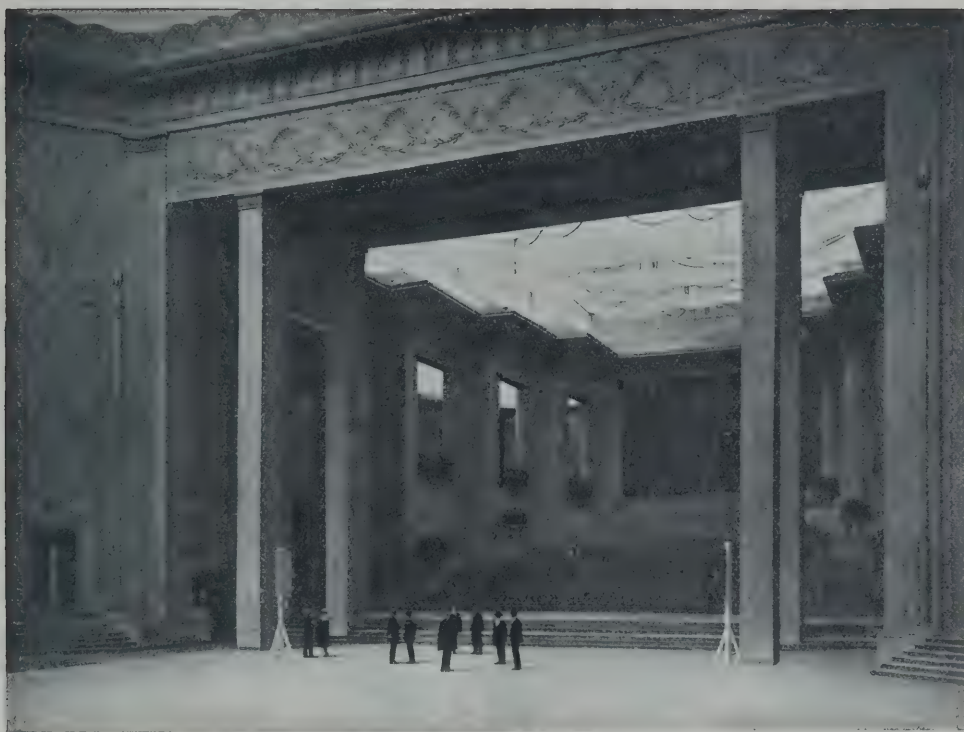
In some cases one saw absolute throw-backs to the American totem and Mexican forms and their regularised disorder. A great deal of this was criticised as dull affectedness. The affectation of childishness and primitiveness by adults lacks the spontaneous freshness of children or savages making their own untrained efforts.

Whatever influence the Exhibition may have on the design of exhibition buildings, its influence on purely domestic architecture, except in relation to the treatment of surfaces, decoration and lighting, will be but slight. With few exceptions it was in the French village alone that there were simple examples of domestic architecture. These, very charming in their way, were limited and lacked any outstanding features of originality.

The fullest advantage was taken of the Seine at night for obtaining really beautiful reflections by the brilliant lighting of the bridges, especially the Pont Alexandre III, the arches of which were converted into cascades of ever-changing colour supplemented by huge, movable fountains on floating rafts which shot their jets in ever-varying forms to a great height over lights concealed in the rafts themselves, the colours of which were changed at will. This, together with the general scheme of illumination, which, however, was of a rather primitive order, consisting for the most part of electric bulbs outlining the main features of the buildings, produced a very brilliant and full scene at night. On the other hand, the effect of the Exhibition as a whole, as seen across the Seine, was certainly disappointing except at night. The one brilliant exception to this criticism was the British Pavilion, because the architects had recognised that the value of their site right alongside the Pont Alexandre III lay in its river frontage—and they made the most of it.

The unfortunate juxtaposition, however, of the British Pavilion and the huge, almost mausoleum-like Italian structure gave it a certain flimsiness and lack of substance which promoted so many

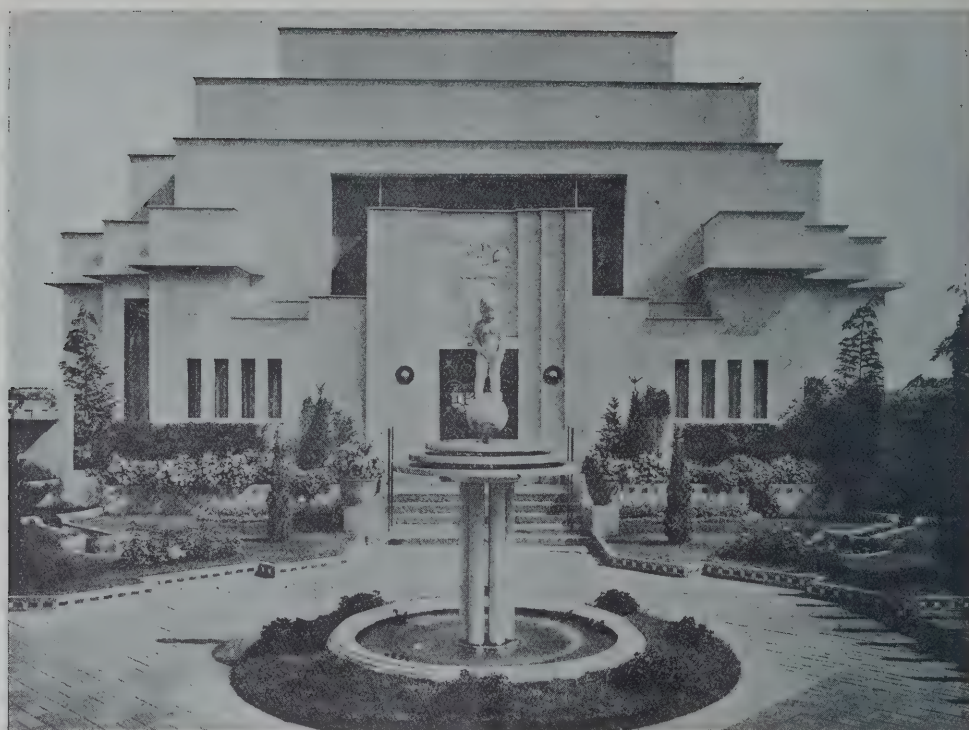




THE STAIRCASE OF HONOUR. Designed by Charles Letrosne



PORTE D'HONNEUR. Designed by MM. Henri Favier and André Ventre



PAVILLON DU COLLECTIONNEUR. M. Patout, Architect  
JARDIN. MM. Vacherot and Rioussé, Architects



PAVILLON DU COLLECTIONNEUR. Designed by M. Patout



of the criticisms, most of them quite unfair, which were levelled against it.

Whilst the interior lighting in the Exhibition, especially that of the show-cases and exhibition halls, was superb, the exterior lighting, as I have said, was primitive—it could not in any way compare with the effects which were produced both at San Francisco and more latterly at Rio de Janeiro.

## PART II.

It has been said that the Paris Exhibition, with its immense variety, its ceaseless vitality, its insistent and changing appeal—all things which cannot be rendered in a report and of which no account can be of any account—had to be lived in before it could be realised and visited many many times before being fully understood.

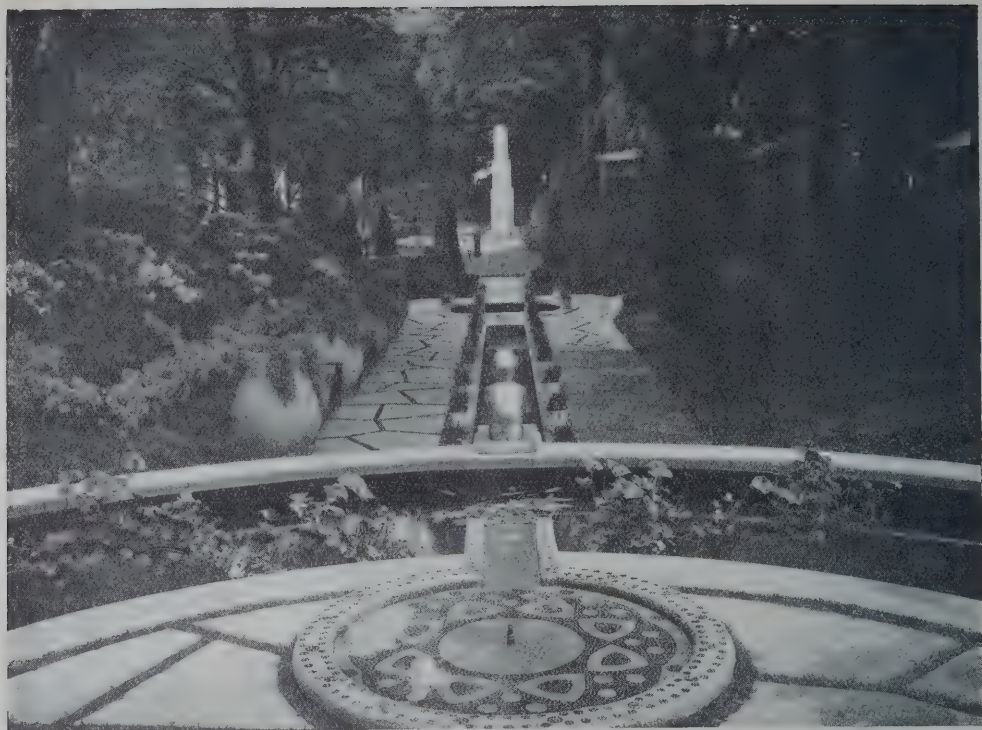
A hundred papers, fully illustrated, would be necessary to cover the whole of the ground. Therefore I am making no attempt to touch on the exhibits themselves, except in so far as they are more intimately connected with the problems in architecture. At the same time the very complete illustrated records, some of which are already in existence and some of which are under preparation, will form a comprehensive and lasting record which should be available in every institute and school of art and design in the kingdom. These reports are mostly sectionalised. There is a series of 13 sections brought out by the well-known firm of Moreau et Cie. in Paris, which is available at a cost of some 850 francs or about 56 ros. at the present rate of exchange. Monsieur Paul Léon, Directeur des Beaux Arts in Paris, is also preparing a special report which cannot fail to be of unique and permanent interest.

I am afraid it must be admitted that, with a few well-marked exceptions, the lessons of Paris were lost on our industrialists. For various reasons, into which I need not attempt to enter, there was a decided apathy. We encountered it in the early stages of the organisation of the British Section, and it was certainly no less marked during the period of the Exhibition. There were, of course, brilliant exceptions, and one can be assured that those who followed up its lessons in an adaptive spirit will reap their full reward. Those who did not, may yet make up for lost time by a careful study of the numerous records to which I refer. It is hoped that not the least interesting of these will be that which is being prepared of the British

Section under the editorship of Sir Hubert Llewellyn Smith, Chairman of the British Institute of Industrial Art. In spite of criticisms levelled from certain quarters at the British Section, I am sure you will be glad to hear that of some twenty-two nations participating, and excluding of course the French, we stood second on the list of the high awards, taking no less than 32 Grand Prix. Of these 32 awards no less than 12 went to our Educational Section, which was by no means a very large one. It is interesting to note that the London County Council Central School of Arts and Crafts led the way, while the Royal College of Arts came second. Surely this is full of hope for the future.

The casual visitor to the Exhibition usually formed an unfortunate and incorrect opinion. He was bewildered with forms and features which were entirely unfamiliar to him and which he did not hesitate in classifying as abominable. In reality there was something beautiful to be found at every turn. The immense variety, the changing appeal, the diffusion of the every effect, took time to assimilate. I have recently been reading some of the reports which are being prepared by experts on the various sections of the Exhibition for the purpose of a general review of the whole Exhibition which is being prepared in connection with the British Section. There will be no impropriety in saying that while in the opinion of the writers there are wide differences of opinion as to the merits of certain exhibits, the note of real appreciation of the value of the lessons taught is constant.

Emerging from the sense of bewilderment inevitable among such variety and weirdness there are three main lessons which call for general acceptance and admiration. These are (1) co-operation and team work, (2) the art of presentation carried to heights never before attained, and (3) the relation of modern lighting effect to both—lessons which I am sure everyone here will appreciate and endeavour to apply. For the first time it seems that it was possible to secure the genuine collaboration of architects, builders, artists, manufacturers, art patrons, electrical engineers and craftsmen of all kinds who were inspired by the success of their efforts regarded as a whole. While this was more marked in the French section, and it was natural that the French section should dominate the whole Exhibition, there are many instances of it in the international sections. In the case of the industrial exhibits it was the trade

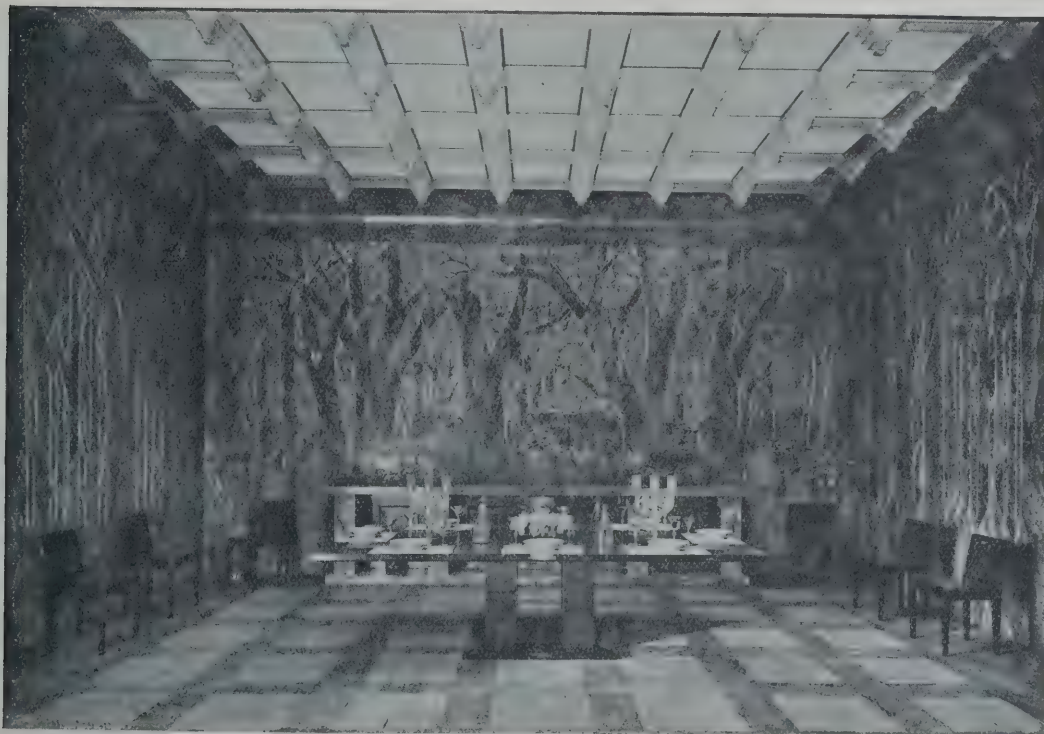


THE GARDEN OF THE VILLE DE PARIS



THE SÈVRES PAVILION. MM. Patout and Ventre, Architects





DINING ROOMS. Designed by M. Lalique



JARDIN DES NYPHEAS. Designed by M. Laprade



BRITISH RESTAURANT AND GARDEN



associations concerned who selected the teams and saw that they pulled together. In the case of the interior ensembles it was the collaboration of all those I have mentioned, and many others, which produced the wonderful effect to be seen in the *Ambassade Française*. If Paris, 1925, produced nothing else but this one lesson it would have been well worth while.

My second point is the interesting developments shown in the art of presentation. We are all accustomed to exhibition halls which are of the same dimensions, whether the articles to be shown in them are as different as a railway engine or a mouse trap. In the case of Paris the main galleries of the Exhibition were, in point of fact, in the huge *Grand Palais*. It was treated not only to provide the vast central hall of Babylonian design and dimensions already referred to with an imposing grand stairway rising to the *salle des fêtes* and from thence descending again to a cunningly contrived theatre or conference hall, but the aisles which radiated from these main features, while they preserved the continuity of the general motive in so far as the centre transepts were concerned, left full freedom of treatment to the occupants in their own courts.

The French sections of jewellery, pottery and perfumery were perfection. The scaling was entirely appropriate: it started with the dimension of the object to be shown, then the dimension of the frame to surround it, and the projection of light on the object to show its fullest beauty. The incidental architectural and decorative treatment was always subordinated to the exhibits themselves. Take, for instance, the perfumery section. Here you had thirty or more firms each occupying a separate alcove, each employing a different method, entering their attention not only on the beauty of the receptacles which contained their wares, but also on the delicate bracket or shelf on which they were arranged, and arranged sparingly and so cunningly as to arouse a real desire for possession. Again, in the jewellery section, the same method and the same results; and in this section, in order to ensure the requisite safety, there was an entirely appropriate and seemly central lounge from which the attendant guardians could watch their wares in comfort—an obvious necessity, as there were exhibits of very high value, hundreds of thousands of pounds' worth in a single case. The whole design of the jewellery section was based on the need for clear vision and proper protection, yet one was

unconscious of such intention. Again the colour scheme—biscuit and grey tones, soft lights, and in some cases a cunning, nodding motion to give life to a tiara as if it were actually worn. The exhibits themselves I cannot attempt to treat. I feel sure, however, that the jewellery exhibit in Paris excited to the full all that was best or worst in everyone, especially the weaker sex. From the jewellery we pass to the metal ware, most of it silver with a dull patina, and again entirely appropriate scaling brought the exhibits to a range from which they could be properly appreciated. There was a pleasing variety of form and level which increased the interest in the whole; the same soft neutral colours, with just a touch of a stronger colour here and there, perhaps a single lamp shade or a trail of flowers in each opening—always appropriate and subtly concealed lighting. In many cases the only light in a gallery was the glow from the show cases. I am not quite right in using the words "show cases," as there were few of them except those which were built in the wall and which formed part of the design.

In the pottery section there was a difficult problem. Part of the section was lit by natural side lighting and part of it, mainly that farthest from the windows, had to be artificially lit. The methods employed were quite charming. It was difficult to see where the natural light ended and the artificial lighting began. Transparent objects in glassware had light projected upwards through the glass shelves themselves, in all cases concealed, and thrown so as to get the best effect; for instance, a figure or highly decorative top to a pot or urn would be lighted from above, whereas on the lower shelves lighting from one or both sides would be used. The strength of the light too was admirably adjusted; in fact it may truly be said that in each of the sections which I have attempted to describe the lighting was the dominant and most important feature. I am glad to say that in the British Section we had an admirable example of good showmanship in our pottery section designed by Mr. George Sheringham. I think this was as good in its limited way as anything in the Exhibition, but it was handicapped by being in direct juxtaposition to more primitive forms of presentation.

Lastly I come to the all important point of lighting treated in general terms. Electric lighting has given us a power in obtaining effect and added



LA MAISON BRETONNE (TI-BREIZ) LUCIEN VAUGOIS. Designed by Pierre Patout

beauty to architecture which is epoch making. But it is curious how hard it hastens to cut adrift from convention and the earlier developments of electric light in the old forms of candlesticks, oil lamps and the like. Electric radiators are not sufficient in themselves, but must be supplemented to look like a coal fire with a little motor to make a flickering flame and such like, the smoke and ash only being left to our imagination. More recently, and only to a very limited extent, do we find flood lighting or that admirable system of diffusion through a glazed roof which can be seen in the House of Commons and the Tate Gallery. A drawback to pointed lighting, *i.e.*, where the points are seen, is, firstly, reflections, secondly, as in the case of street lighting, the obliteration of all architectural effect. Every logical system of electric lighting should be to give the effect of light without making one conscious of the source from which it proceeds. If the actual lamps themselves have to be produced, they should form part, an integral part of the decorative treatment of the room as a whole. An admirable

example of this is shown in Lalique's work, where he uses glass for the whole of the roof of his two dining-rooms and places his light in the groining and coffering of the ceiling. Another lesson we all learnt at Paris was that strip lighting is only necessary to a very limited extent. It has been nearly always used in cove lighting, but we have learnt that similar effects can be equally well produced by special faceted reflectors of the requisite dimensions. By means of proper reflection, ordinary lamps could be used for the lighting of recess show cases, and they are, of course, much more economical. I am afraid the criticism that the lighting of our buildings has often been an afterthought is only too true. Lighting can make or destroy the beauty of any fabric—it is absolutely certain that it must eventually attain its true relation to modern architecture. There was little to be learnt from exterior lighting at the Paris Exhibition—in nearly every case the old system of rows of coloured lights was utilised: there was little flood lighting. Belgium had some on their pavilion, we had some on ours, but, as





'PARFUMERIE.' MM. Raguenet and Maillard, Architects



HALL OF THE PAVILION PRIMAVERA. M. Levard, Architect

I have said, the four towers of Plumet were merely outlined in the ordinary way, whereas by projection they would have been features of real beauty at night. The lighting at Paris was in no way comparable to that which was adopted in San Francisco or more recently at Rio. It is largely a question of cheap power. At Rio the system

cheaply to produce these effects, but is it impossible that a preliminary effort may not be made in the recently constructed Regent Street? In years to come the necessary recesses for holding the flood lights will be an accepted architectural requirement. Again, think of the field that there is in signs and advertising. In the last few years



PAVILLON DE LA VILLE DE PARIS—ENTRANCE

is entirely hydro-electric, and therefore very cheap. All the main Exhibition buildings were lighted by flood lighting, no source of lighting being visible; and the beauty of this effect you will see from the two slides on the screen. Compare these with the two slides of the Paris Exhibition. What a sight London would be if we could only light it by these methods. It will take many years for us to get power sufficiently

the development of the red and blue neon light has enabled signs of all kinds to be shown in a very pleasing manner both by day and night. The lighting of the Eiffel Tower for advertisements was one of the most beautiful sights I have ever seen. It was a constant variety of most wonderfully coloured effects, and the great height of the tower and the ceaseless change of form and colours in its effect made it one of the sights of Paris, and



very beautiful one too. It is an admirable example of how such a form of advertising can be really attractively treated, and so tend towards the disappearance of some of the abominations which confront us whenever we go to a play. Of course, to get the full effect from decorative lighting one requires a river, and this we had on the Seine at Paris. Gay bedecked barges full of singers and dancers and the like passed up and down the river, but a description of the lighter

expressing his love for his craft without any thought of its adaptability and construction for commercial needs. At the other end you have a school of virulent modernity, striving to take opportunity from the unhealthy reactions of the age to satisfy an unhealthy appetite for hideous and unnatural forms.

You have the coteries, the societies and individuals supporting their particular method, and at the other end you have a world-scattered public



A DINING ROOM. Designed by Maurice Dufrene

de of the Exhibition would alone occupy an evening.

But what advantage are we, who are completely dependent on maintaining our position in the world's markets, going to get out of Paris? Very little, I fear, if we regard the lessons in an academic spirit. It is all very well to draw up long reports, very often discursive and critical, but very often lacking in constructive suggestion.

One thing we all learn in exhibition work, and that is, that no enthusiasts ever think alike. You have a craftsman with his exquisite hammered surfaces, his delicate twists and cuts and incisions

demanding, as a rule, something which familiarity has made it appreciate. How many of us appreciated the cloche hat when we first saw it? It is surely an expression of present times, the leveller of all. However beautiful a woman's brow and however well set her head on her neck, the present mode of concealing both by a low hat and a fur collar is to give every profile equal value.

We see surely similar influences at work in our homes. The £200, £300, £500 interior, all cast in the same mould, all pleasing enough, all constantly improving, are as levelling in their influence and outlook as the long new streets

of Suburbia. How can we escape? Well, I think the way lies with you now, as it always has. With you, architects—and I am told that you find real inspiration from many of the lessons to be drawn from Paris.

We can see true architecture every day of our lives as influenced by the mechanical and artistic needs of our time. What is more beautiful for its purpose than the modern motor car and the modern express engine? What is less beautiful than the war-time dwelling? What is more destructive to the building of the human frame than the present conditions under which one half of our people live. It is for this reason that one can but regret that the lessons of Paris are applicable only to the cases of five per cent. of the human race. Just before the close of the

Exhibition, these reflections were common-voiced in Paris, and there was some talk of an effort being made in the succeeding year to concentrate on and meet the present every-day demands for comfort and cheerfulness of impoverished people. For various reasons the idea has come to nothing. Surely, apart from the purely commercial aspect of the problem, which in all conscience is important enough, this is a subject on which you exercise irresistible influences.

May we not go a stage further and unite in prayer that at no distant date the Great Architect of the Universe will send an Apostle to demand that our race may be allowed to multiply and develop with chances at least equal to those given to chickens on a well-run poultry farm.

## Discussion

### THE PRESIDENT, MR. E. GUY DAWBER, IN THE CHAIR

Sir WILLIAM H. CLARK, K.C.S.I., C.M.G. (Comptroller-General, Department of Overseas Trade), in proposing a vote of thanks, said: I have a good deal of practice in thanking Colonel Cole. The Department of Overseas Trade has to organise many exhibitions, or participate in foreign exhibitions, and I am responsible for their being properly organised. But Colonel Cole does the work, and all I have to do is to thank him afterwards. Exhibitions differ on many points and in their subject matter; they are held in different countries, but they all have one peculiarity in common, and that is that in the last few weeks before the opening it is a desperate race against time to get finished. I have always observed that Colonel Cole is always able to deliver the goods. He has given us to-night an extraordinarily interesting account of Paris—interesting to those who visited the exhibition and to those who did not.

It is late, and in any case I should not be able to talk on the æsthetic aspects of the exhibition; Sir Charles Walston will follow me, and he will deal with that part. I would, however, like to say a word or two about certain factors which impressed one in Paris. I think exhibitions of the future will probably take a new form. The exhibitions before the War were mostly universal exhibitions, like those of Paris, Chicago, Turin, Brussels, where each country was invited to show everything it produced: its arts, its manufactures, etc. It is like the final effort at Chinese examinations when you are invited to write down all you know. The result is some element of confusion. With the enormous expansion of industry it is impossible to make a representative display. Some light was thrown on that at Wembley. The Palace of Engineering was merely British engineering, but it covered 11 acres, and the buildings were costly and large. If it had been an international show and other nations had attempted the same thing it would have been entirely

unmanageable. If the universal exhibition goes on, will be more difficult to get exhibitors to make it worth while, and it is not really educative in the best sense. The public wander through from one thing to another, sometimes looking and then drifting into the art gallery, then on to the amusements park; it is all too vague and inchoate. I am not criticising Wembley, which was done for a set purpose and it did serve to illustrate the Empire, but I doubt whether we shall see many more universal shows. Paris last year struck the right note by laying down a definite sphere in which to exhibit this was more manageable and more economical in practice, and the educational side of it takes on a double value. It is not merely that you are educating the public, which is always a difficult matter, but exhibitors are educating one another. You see what is being produced in most of the civilised countries of the world, or certainly in Europe, and that is very important, especially for the British manufacturer. I do not agree with those who find fault with the British manufacturer and say he is behind the times. He is at a disadvantage. It is more difficult in an island such as this to keep in touch with the movements which are going on in the world than it is on the continent of Europe. We know it is said that art knows no political boundaries, but at the same time it is not so easy for the influence of movement in art to cross the Channel between England and France as it is for it to cross the Rhine, or to pass between Italy and Central Europe. We, of the Department of Overseas Trade, were keen to get a representative collection in our part of the exhibition, but I felt it was more important that manufacturers should come over and see what the other people were showing, that they should know what is being done in other countries; and if they want to reject them, they can do so with full knowledge. It was rather disappointing to see how few of them took the



trouble to visit the exhibition. Those who did were amply rewarded.

We do not want too many exhibitions even on this comparatively small scale; they are very costly, both for the State and for the manufacturer, but, with this limitation, they are worth doing, and I hope that, at reasonable intervals, there will be exhibitions of this kind, sometimes one in which the artistic side is predominant, sometimes the more scientific, but always showing their application to industry.

I shall not diverge into an economic discussion, but one of the peculiar features of the present day and the difficulties we are encountering is the tendency for other countries to set up manufactures—countries which we used to regard as predominantly non-industrial; they are manufacturing simpler types of goods, because they cannot tackle the more elaborate types. That means that in the future we shall have to depend more and more upon the higher qualities, and we are peculiarly adapted for that; we have the inventive genius, the experience and the capital to draw on experiment. But for that it is important to keep in touch with everything which is being done in the world, and for that purpose exhibitions of this kind are admirably suited and are of enormous value.

Sir CHARLES WALSTON, Litt.D. (Honorary Associate), in seconding the vote of thanks, said: I feel sincere gratitude to Colonel Cole for the manner of his exposition and what he had to say about the exhibition in Paris. As one who worked with him in a limited department, I can bear testimony to the splendid organisation, and especially to the fine team work, which Colonel Cole considered so important, and which depends chiefly on the leading spirit who knows how to keep his people together for the one great object.

I have been asked by Sir William Clark to enter more directly into the main subject which the lecturer has brought before you and has so beautifully illustrated in the slides. I will merely touch lightly on it. I have not the same right to speak on this aspect as has Colonel Cole, because my visits to the exhibition have been but few, and they were at a time when the exhibition had not been completed, not even the British section of it. While you were looking at the photographs you will have appreciated the enormous bearing the exhibition had on industry, not only art industry, but the general trend of industry, national industry, in this country. He has singled out two or three points. The first was co-operation, which is so important that I need not dwell upon it again. The second was team work, and I think that meant that within this co-operation there should be defined bodies each with its own sphere of activity, and all co-operating together for the great end. And the final lesson he impressed upon us and illustrated so fully was the lighting and its adaptation to the presentation of the articles to be exhibited, the important thing being that it should be part of a harmonious and pleasing whole. Both he and Sir William Clark dwelt on the importance of such international exhibitions, and how necessary it was for the workers and the exhibitors to see what the others are doing. But that is a two-edged sword. There is the question of taste, about which so much has

been said and written. Taste depends on habituation. There is danger in this international taste. I am old-fashioned, indeed I am worse than old-fashioned; I have been by profession an archaeologist and an antiquary, as one who looks backwards, not forwards, but I think I look forwards all the same. I cannot help feeling, though the world has suffered a great deal from ethnological Chauvinism and the clashing of nationalities, that there is something good in true nationality, which is not necessarily ethnological: and that is, that each nation, as each individual, has some message, something to do if he or she or the nation does it honestly and truly. And, thus living, the individual, the nation—the British nation—has a message to give, as the French have, as before the war the Germans had, and let us hope, after the war the Germans will have, as the Italians and the United States have. And although we ought to learn from each other, we ought to be careful that we do not lose our own character and that the continuity of our traditions is assured, not always remaining fixed in the past and not always turning round and round in the same sphere, against which the young are quite right in revolting. It should be a logical, consistent, truthful development of our own thoughts and our own actions and our own tastes. These exotic influences which come to us are, nearly always, wholly bad. I saw the Russian Ballet come here, and I saw the crude colours on the stage, and I saw what it meant to the British taste which was becoming accustomed to it. I felt that the colours and stuffs and the dresses which were worn at the Russian Ballet influenced the whole production of our art, and that it was not British. The lecturer used the term "totemism." We have suffered from that, and there comes a question which I would like to dwell upon, the economic question: how fashions are produced and how they are used. There we have nothing artistic and nothing instructive; these are only the whims of the designer, who says, "I must have something new." And what he does is to turn back to the distant past, into savage life. Not many years ago I was taken to one of the great dressmakers in Paris, where models were shown to us, and I said: "What is this doing here? It is taken from Schliemann's work, and this from Arthur Evans," and now we have got Tut-ankh-Amen's work, which is used industrially to vitiate our national Western taste. I am not an antiquary, I am a real futurist, because we must develop something on our own lines. I am sure Colonel Coles has felt this, and I am bound to admit that was the impression—or the depression—which I got from the total effect of the Paris Exhibition, the effect of people striving who said, "We must not be pretty; don't be classical, go to the savage, go to some child's work; don't go on as civilised beings to invent new designs which respond directly to us and our civilisation." We find lumpiness, huge and vast, not the beautiful work of the past, but, in many respects, a degeneration of our taste.

But do not let me end on a negative key. Our lecturer has shown us the direction in which we can learn, and it was in that direction only—and architects know this better than I do—namely, construction. Be constructive, stick to your material and its qualities. He showed us the way. If you carry away from the lecture nothing else but what he told us as to the use of light and the emphasis he put

on it, leaving behind the old traditions of the candle and lamp, using electric light constructively as a function, then the lecture will not have been delivered in vain. He showed also how glass work can be used, and what possibilities there are in glass. We live in an age of steel, concrete and so on, and you yourselves know how you can use these things for the future. So it is well we should have these exhibitions; but I hope we shall, as an occidental and not an oriental people, develop our own tastes through our historic past, not merely reproducing the classical or the mediæval or the pre-Raphaelite, but as people who are moulded on the experience of our Western civilisation. I hope we shall then look forward to the future, and not negatively say, "We must do something new, something differing from the past, something which has grown out of the present and reaches towards the future."

Dr. R. ANNING BELL, R.A.: I had the good fortune to be Colonel Cole's colleague, and I can testify to the truth of the remarks which have been made about team work and the importance of having a good team leader. We had a very pleasant and happy time in Paris. We heartily felt, as we do in exhibitions, that if we had had three times the time and three times the money we could not have done all we wanted to do. Our British manufacturers were not so understanding of the value of the exhibition and its advantages to the future as they might have been. It was very difficult for Colonel Cole, in his department, to get enough work sent in of a respectable average standard that could stand up to many of the foreigners, who behaved more liberally and loyally to their own countries. I do not think our manufacturers were quite so generous towards it as they might have been.

Mr. HOWARD ROBERTSON [F.]: I will be very brief. Everything Colonel Cole said meets with my approval, because it was with him I and my partner dealt during the work at the Pavilion. It was a great surprise to us to find a Government Department could be so different from what we had always expected. We thought we should be brow-beaten and should have a great difficulty in expressing our ideas. For better or worse, that was never the case; we were encouraged all

the time. As to the novelty of the Paris Exhibition, I do not think the British public need ever be afraid of losing its tradition. The English are a very conservative people, and nationality always counts in the long run. You could implant Indo-Chinese architecture in England, but in forty years it would again be British. So when novelty is manifested, as it was in Paris, I do not think we should always hear the trumpet-call of danger. It is easy to be faint-hearted, but it is the wrong policy if there is to be progress. The note of encouragement was the one which Colonel Cole struck, and it is a sort of beacon-light to anyone who is trying to design. It is not a movement simply of trying to be funny; there is a great deal of thought at the back of it, and as such it is to be encouraged.

Major A. A. LONGDEN, D.S.O. (Department of Overseas Trade): Everything has been said, perhaps, except one. We certainly learned the extraordinary power of co-operation. The firms who exhibited in France did not exhibit in a single section, but in ten or twenty different parts of the exhibition. Here, if one exhibitor co-operates with another, he regards himself as finished with as far as further co-operation is concerned. Lalique exhibited in twenty different sections. In future our firms in England might club together and co-operate and so put up a better show. Apart from that, all of us have established a liaison with at least twelve to twenty nations who exhibited, and in the Department of Overseas Trade we may be of some use to architects and artists generally. We have established a liaison for all time with the Commissioners-General and the Secretaries-General and those who organised this exhibition, and we can by correspondence keep up a close relationship with the nations who exhibited.

The PRESIDENT: I should like to thank Colonel Cole for the way in which he has described and presented the slides of the Paris Exhibition. We have had an admirable proposal of a vote of thanks to him, moved by Sir William Clark and seconded by Sir Charles Walston, and there is nothing for me to say except to add my thanks and to put this proposal to you for your acceptance.

The vote was carried by acclamation.

Colonel COLE briefly responded.



♦♦ It is desired to make acknowledgments to M. C. Moreau, the well-known Paris publisher, and to the Architectural Press, Ltd., for the use of many of the photographs illustrating this Paper.



## THE SECOND VOLUME OF THE WREN SOCIETY, 1925.

By J. ALFRED GOTCH.

The second volume issued by the Wren Society has now appeared under the able editorship of Mr. Arthur T. Bolton and Mr. H. Duncan Hendry, and it maintains the interest aroused by its predecessor. The circumstances of the seventeenth and early eighteenth centuries were favourable to the preservation of such drawings as were made by the few eminent architects of the period. There was a genuine interest in architecture among men of culture, who were pleased to possess books on the subject, and architects appear to have been willing to gratify this very laudable desire. It would seem that some of the drawings in the John Thorpe collection may have been prepared with an eye to publication, which, however, never came to pass. Those in the Inigo Jones and Webb collection were, many of them, published. Colin Campbell and Gibbs gratified the public and themselves by publishing their own designs and those of others; and now we learn from the introduction to this fresh Wren volume that some of the many drawings which have come into the editors' hands appear to have been prepared with the same object in view.

But publication was not the primary intention, for in the case both of the Jones-Webb drawings and these of Wren it would seem that the people into whose hands they came regarded them as being of such interest that they disposed of them to various persons or institutions, such as colleges, who might be supposed to value them highly. Thus it came about that the Jones-Webb collection found homes at Chatsworth, Worcester College, Oxford, and the British Museum; and the Wren collection at All Souls, Oxford, St. Paul's Cathedral, and elsewhere. The first volume published by the Wren Society dealt with the drawings at All Souls; this second volume deals with some of those at St. Paul's; the third volume will deal with the remainder, and an intimation is given that future volumes will be devoted to other drawings known to the editors, but of which the location is not disclosed.

The volume now in question is entirely devoted to St. Paul's Cathedral and consists of all manner of detail drawings preceded by a careful index of all the drawings contained in the first of the two volumes preserved in the library of the cathedral. The larger part of the contents is here reproduced, and the index gives references to the drawings in the first Wren volume, where any connection exists. It will thus be seen how valuable this volume is to the student, exhibiting, as it does, Wren's actual details for various parts of the cathedral and enabling them to be linked up with those in the collection at All Souls.

What the fresh volumes of which the editors have

cognisance may contain is not indicated, but if it should turn out that they are connected with Wren's domestic work they will be of singular interest, inasmuch as up to the present the examples of his work at St. Paul's and the City churches far outnumber those of houses.

The work of the Wren Society is of first-rate importance to all serious students, and all who are interested in the historical side of architecture would do well to further the work by joining the Society, thus helping its funds, and receiving in return these extremely interesting reproductions of Wren's original drawings.

## Reviews

DUTCH ARCHITECTURE OF THE TWENTIETH CENTURY. Edited by J. P. Mieras, Director Bond of Netherland Architects, and F. R. Yerbury, Hon. A.R.I.B.A. London: Ernest Benn, Ltd., 1926.

The alliances between England and the Netherlands have, at one time and another, been so intimate that one cherishes a natural sympathy with her architectural development and civil life. Had it not been indeed for our united policies, Europe might have found itself mapped out into Spanish provinces.

Even before a Prince of Orange sat upon an English throne, Dutch architecture and Dutch painting played no little part in our national development. Both countries are now facing a new era in building construction, and it would look as though our neighbours had grasped the problem with greater resolution than we have done. Steel construction has reduced architectural effort to the provision of an ornamental covering; while the combination of form and stress in systems of concrete reinforcement has not yet found expression.

There is nothing to be said against architectural coverings. We are familiar with the many examples of Græco-Roman times. But with the new Regent Street ever present in our minds, we cannot claim to have achieved success. The Roman substructure was plastic, ours is not, and its vertical rigidity can neither be expressed nor concealed by Renaissance detail. Verticality was expressed in Gothic architecture relieved by the arch, but the arch is excluded from steel construction. To what extent this vertical emphasis which tends more and more to dominate modern design is due to structural necessity on the one hand, and to æsthetic appreciations on the other, may not, perhaps, be definitely determined, but it is very apparent in some of these photographs of Dutch architecture taken by Mr. Yerbury, and they are full of interest. Experiments in ferro-concrete have been seriously entertained only in the last few years, but a young school is growing up which, as M. Mieras tells us in his introduction, is endeavouring, not without success, to carry on national traditions while conforming to the new demands. This introduction is very ably written, and one recognises in a survey of the last fifty years tendencies very similar to those which characterise our own changes of outlook. He sketches the decay of

interest taken in the influence of Dr. Cuypers, whom he compares to Viollet-le-Duc, valuable as that influence was, and the emergence of Berlage, the architect of the New Exchange, Amsterdam. Here we are reminded of Burges and Godwin, who broke through the formalities of their Gothic predecessors, while Norman Shaw frankly revolted.

Van der Mey and de Klerk, in their design for the Shipping House, Amsterdam, erected in 1913, began to handle reinforced construction, but without any endeavour to express it. When we come, however, to de Bazel's block of offices for the Netherland Trading Co., ten years later, a fine composition in the vertical manner has certainly been achieved. But we are not seldom reminded that new styles are heady, like a new wine, and may readily lead to extravagances that we may smile at or resent according to our humour. C. J. TAIT [F].

THE ART OF GREECE. By E. A. Gardner, Litt.D.  
[*The Studio*, Ltd. 10s. 6d. net.]

This little book is an admirable compilation of the main sources and achievement of the arts and crafts of Ancient Greece—Architecture; Sculpture; Pottery; Painting and Drawing; Metal Work; Dress; Gems, Coins and Jewellery; Furniture. Any book by Professor Gardner on such a subject would command attention, but its great value lies in the account of the sequences in each section. The only one that seems hardly to be treated with adequacy in this respect is "Painting." The value of vase painting in estimating the outlook of the larger decorative work is rightly insisted on, but where so much attention is paid to sources in other departments of art, one looks for more than the few sentences in which Minoan and Mycenaean wall-paintings are dismissed. Perhaps Professor Gardner is unduly scornful when he says that these frescoes cannot have exercised much direct influence on later art. There must have been some connection between the art of the gem cutter and the fresco painter in Minoan times and the high-water mark of Minoan gem cutting nearly touched the Greek level. With this reservation, however, there can be nothing but praise for the handling of the entire book. It is most attractively produced and most admirably illustrated. The blank pages for notes at the end are a pleasant feature.

D. T. F.

## Correspondence

### LILLE WAR MEMORIAL.

*The Editor*, JOURNAL, R.I.B.A.,—

DEAR SIR,—Having seen in drawings and in being, hundreds, if not thousands, of war memorials, which have only produced in me a curse or a sigh, the temptation to praise when there is an occasion I cannot resist, although it is a trespass on your valuable time and space.

The Memorial to the Missing, Lille, by Mr. H. Chalton Bradshaw, is worthy of close attention as it shows a highly intelligent appreciation of the objects and requirements of war memorials in general. Although in a foreign style that I do not like in this country, it has artistic qualities which are most praiseworthy.

The visitor, instead of being left where he will be run over if he stops to look at the memorial, is enticed into a circular cloister at once suggesting quietness, safety, and repose, with a circular centre of green turf surrounding the statue and open to the sky; whereby the outer wall of the cloister is well lighted from *behind* the spectator. The cloister thus provides a continuous and similar background to the statue from every angle it is looked at.

The cloister being roofed, the lettering is everlastingly protected from the effects of weather. The size of the cloister in relation to the statue is of very great importance in regard to the effect of light and shade, and seems to me to be exactly right and very pleasing.

It is interesting to note that the scheme of this memorial could be equally well carried out in the Gothic manner as in the Classic.—Faithfully yours,

C. F. A. VOYSEY

### REGULATION OF COMPETITIONS.

*Salter's Acre,  
Gregories Road,  
Beaconsfield,  
21 February 1926.*

*The Editor*, JOURNAL, R.I.B.A.,—

DEAR SIR,—I have read with considerable interest the report of the general meeting on the 15th inst., when the motions of Mr. Wills upon the regulation of competitions were discussed, and I should like to endorse the most damning criticisms that can be levelled against the "binding" conditions in architectural competition.

It seems to me, however, that the whole difficulty can be avoided very simply by the insertion of a saving clause to the effect that such and such conditions are regarded as essential, but disregard of them will not disqualify a design *which by ignoring them gives a better solution of the problem*.

This would have the effect of encouraging the competitor (who considers the problem deeply) to use his judgment and at the same time would not demand from the assessor the struggle between his commonsense and the written word.—Yours faithfully,

W. F. C. HOLDEN [A.].

### STEEL HOUSES AND ARCHITECTS.

*68 Lavington Road,  
Ealing, W.*

*The Editor*, JOURNAL, R.I.B.A.,—

DEAR SIR,—In view of the recent decision to build some thousands of steel houses in Scotland I should like to ask whether it would be possible for the R.I.B.A. to approach the Government with a view to ensuring the appointment of a qualified architect to assist Lord Weir's engineers in the preparation of the few stock designs that will be required. Some of the exhibition steel houses erected last year were very poor architecturally, and it seems to me of the utmost importance that designs which are to be repeated in such vast numbers should not be entirely in the hands of those whose qualifications are practical rather than æsthetic.—Yours sincerely,

F. L. JACKMAN.



## THE LATE ERNEST BARNSELY.

AN APPRECIATION BY F. W. TROUP [F.].

Ernest Barnsley of Sapperton, a tiny village nestling in fold of the Cotswold Hills, was known to comparatively few members of the architectural profession. His death month ago brought to a close the life of a man who, though of singular modesty, was possessed of that rare combination of qualities that go to the making of an ideal architect.

It is only a few years since the death of his friend and colleague, Ernest Gimson, made the first break in the band of craftsmen who, trained in the offices of distinguished London architects, agreed to forsake the conventional practice of the professional architect and betake themselves to a craft as a career. To achieve their purpose with logical completeness they decided to retreat to the country. In 1893 they settled first at Pinbury, and later the village of Sapperton close by.

At the outset all started on the making of furniture, striving to reach the soundest as well as the simplest and most direct ways of attaining their object—the actual making of things which would be both useful and sightly. What they made was to be based on the best that had ever been done before and they aimed at excluding the superficial that marks the personal whim of the maker, pleasing enough in itself, but dead when copied by the imitator. That they succeeded in this high endeavour is seen by the interest and admiration extended to Gimson's furniture and other of his work illustrated in his recently published *Life and Work*.

Although Gimson was perhaps the more distinguished and in later developments the better known of this band of craftsmen, credit must not be assigned to him alone. His may have been the dominating spirit in the group, but all shared equally in the analysing, criticising, searching and researching that took place in the early days before they settled down each to his own admirable way of work.

An intimate knowledge of one craft makes it easier for the trained mind to grasp the intricacies—what used to be known as the “mysteries”—of other crafts. Gimson owed this to a remarkable degree; indeed his insight into the proper way to treat rightly and make the simplest use of any material whatever, be it wood, stone or metal, was almost uncanny.

And Barnsley's hand and mind, developing in the same way, gradually reverted and expanded as time went on to his original profession of architect. But the training and practice of his craft had made a vast difference to the buildings he now planned and carried out.

His thorough knowledge of the making of furniture readily extended itself to woodwork and carpentry. The building of his own house in Sapperton, in which he took the part of master of works rather than architect, opened to him all the “mysteries” of the mason's and the slater's and plasterer's traditional ways of work. He truly came a master of all the building crafts as they were practised from time immemorial in the district of the Cotswolds.

Soon after came the great opportunity to display his accumulated knowledge and his skill in planning and carrying to its completion the building of Rodmarton House. The structural work of this house is practically

confined to two materials, stone and oak, and the roof is covered with Gloucestershire stone slates. The stone is local; the timber, felled in the district or, carefully selected by himself in the log, was pit-sawn on the site, and the slates were dug up from the adjoining fields. Although the fittings and practical arrangements of the house are of the most modern kind, the cost was far from excessive for the type of house that Rodmarton is. Here again Barnsley was master of the works as well as the architect who schemed and planned. Lethaby, in his latest volume *Westminster Abbey Re-examined*, remarks that “a palace in the Middle Ages was a school of art and university of the crafts.” Many workmen got their training, or had it revised, at Rodmarton, and the house might indeed in this sense be called a palace in miniature.

Among other of the larger works which Ernest Barnsley planned and carried out were Coates Manor House, extensive alterations to Somerford Keynes old Rectory and to another large house near Wrexham, and there are many smaller though not less distinguished works to his credit.

With his son-in-law, Norman Jewson—another architect who joined the craftsmen group—he built the Village Hall in Sapperton. Here, as in his other buildings, everything is of the most modern, and yet this hall looks now as if it had always been there, completely blended into the old village.

Though Barnsley's bent and first desire was for quality both in materials and of workmanship, yet through it all ran a keen knowledge of value and care for money expenditure. It seemed as if his business aptitude had been inherited from the family of well-known builders in Birmingham to which he belonged. The writer of these notes has listened with envy to tales of how Barnsley overcame financial disputes or subdued without quarrel or ill-feeling the over zealous demands of contractors. With all this he was an accomplished draughtsman who could show on paper clearly, precisely and attractively what he wanted and how he wished it to be carried out in the building. He undertook only so much work as it was possible for him, not merely to make plans on paper for, but such as it was possible for him to supervise personally and “see it through” from the firm bottom under a foundation to the proper mixing of the whitewash on the last ceiling.

Barnsley was, as might be expected, closely associated with and often showed examples of his work in the Exhibitions of the Arts and Crafts Society. He gave the guidance of his knowledge and much time to buildings which the National Trust had taken under their charge. He helped in the same way the Society for the Protection of Ancient Buildings. Few of the members of that Society know how much time he spent in travelling to one or other of the buildings in which the Society was concerned. So conscientious was he that he allowed financial loss to fall on his own pocket rather than curtail the work short of what he thought was right.

Ernest Barnsley's life work will live after him and his influence will merge with Gimson's, inspiring those who worked with or under either master. Very fittingly their graves lie close together each under a yew tree, one on this and one on that side of the path that leads down to the church door in the little village of Sapperton.

## Allied Societies

### NOTTINGHAM AND DERBY ARCHITECTURAL SOCIETY.

#### ANNUAL DINNER.

The annual dinner of the Society was held in Nottingham in February. Mr. H. A. Dickman (President of the Society) occupied the chair, and was supported by a large attendance of members.

The toast of "The Mayors and Corporations of Nottingham and Derby" was proposed by Mr. G. M. Eaton, of Derby.

Responding, the Mayor of Nottingham (Ald. C. Foulds) said that a speaker at a meeting of the Nottingham Society of Artists had accused the city of neglecting beauty. He would not claim that they had anything especially beautiful in Nottingham—except, perhaps, in the matter of statues—but the want of beauty could not be laid at the doors of the present generation. The question was not considered very carefully in the industrial days, when everything was regarded from the point of view of utility. Now, however, they were giving more attention to the question, and when they got the new Exchange erected in Nottingham they would certainly demand that something else should be done in their old-fashioned and untidy Market-place.

The Mayor of Derby (Mr. S. Collis), in congratulating Nottingham on its decision to build a new Exchange, mentioned that Derby also hoped to build a new Town Hall.

Professor F. S. Granger gave the toast of "The R.I.B.A. and Allied Societies," and said that architecture was coming into its own now the amateurs were more or less giving way to the experts.

The President of the R.I.B.A., Mr. E. Guy Dawber, alluded to a subject in which he had taken a great interest, namely, the work of preserving the countryside. The Institute had committees at work dealing with the matter, and they hoped in the summer to launch a large and strongly-backed campaign which they trusted would do something to prevent the rapid destruction of the old villages of the countryside. Throughout England to-day one could not fail to be struck with the disastrous rate of building ill-fashioned, ill-constructed, unsuitable houses without regard to the environment.

They must take steps as a profession, and use all their influence to restrain the authorities and landowners from selling their land to people who wanted to put up little cottages quite irrespective of the beauty of the country they were so rapidly spoiling.

The President of the Nottingham and Derby Architectural Society (Mr. H. A. Dickman), also replying, said the public was taking a more lively interest in architecture than had been the case since the eighteenth century. He congratulated the Nottingham Corporation on the proposed acquisition of a beautiful building like the new Exchange.

The toast of "Our Guests" was proposed by Mr. J. Woollatt, vice-president of the Nottingham and Derby Architectural Society. Mr. A. J. Hope, President of

the Manchester Society of Architects, and Mr. N. Denholm Davis, Vice-President of the Nottingham Society of Artists, responded.

### THE BIRMINGHAM ARCHITECTURAL ASSOCIATION.

At the fifth general meeting of the session, held 5 February, Mr. Robert Atkinson, Director of the Architectural Association School of Architecture, gave a lecture on "Logic in Architecture."

The lecturer pointed out how the ramifications of use, material and climate decreed what was logical in architecture.

A long low structure, containing little detail, backed by towering cliffs, was a logical perfection in sunny Egypt, while the term might be applied with equal truth to the much broken silhouette of a Gothic cathedral in flatter lands and duller climes.

It was logical to expect a plan to give expression to its elevation and to the use for which it was intended, and likewise for a material to be so used and placed as to convey an idea of what its real business was; at the same time a skeleton must be clothed in nature, apart from logic, demands it; and the method by which the bones are covered proves, for or against the logic of man's efforts in architecture. The bones are there; they are clearly indicated in nature, but they are covered over and coloured and have all sorts of ornaments of every tone and tincture, but there is a logical reason for all in nature.

The lecturer pointed out by word, and showed by slides, that the Renaissance was probably the most illogical style of building. A structure was erected to fulfil a certain purpose and then a façade was slapped on which conveyed no logical expression of the building itself or of its uses.

The vote of thanks to the lecturer was proposed by Mr. B. J. Fletcher (Headmaster, School of Art) and seconded by Mr. G. Drysdale (Director of the School of Architecture).

### "WHO'S WHO IN ARCHITECTURE" (1926).\*

The publication of the 1926 edition of *Who's Who in Architecture* has been expressly timed to coincide with the recently concluded amalgamation of the Society of Architects and the Royal Institute of British Architects and the new volume includes the numerous qualification changes which this most important event has brought in its chain.

The new idea has been carefully revised, and its biographical notices of the British architects have been compiled with the greatest care under the editorship of Mr. Fredk. Chatterton [F.].

This work of reference has for years past proved of value to Government departments, public authorities, institutions and the press, as well as to the personnel of the profession, on account of the exclusive character of the information it contains. In the commercial world also, those in need of reliable facts concerning the professional status and executed works of individual architects may be referred to its pages.

\* Published by the Architectural Press. Price 25s. net.



## Obituary

### HENRY CHAPMAN [A.].

Mr. Henry Chapman [A.], of Westoe, South Shields, who died on 29 January, was articled to Mr. Henry Grieves [A.] of that town, and became an Associate of the R.I.B.A. 24 years ago. After travel and study abroad, principally in Italy, he entered the office of Sir J. W. Simpson for some years, and subsequently practised on his own account in Newcastle-upon-Tyne and South Shields.

In conjunction with Capt. H. T. Wright [F.], of Newcastle, he secured the first premium in a competition for a large school at Greenwich, and was joint architect with Mr. G. R. Smith [A.] of a scheme of Cottage Homes for the South Shields Union. His work consisted principally in the designing of business premises and domestic work in the Tyneside district, and he was considerably employed by the Durham County Territorial Associations in the erection of drill halls, rifle ranges and riding schools. At the time of his death he was engaged as architect of new banking premises at South Shields for the National Provincial Bank, Ltd.

His comparatively early death has cut short what promised to be a successful future.

### HARRY PHIBBS, F.S.I. [A.].

Mr. Phibbs was elected an Associate in 1907. He studied at Birmingham School of Art and while there he obtained silver and bronze medals for national competition work. After being an assistant with an architect at Aberystwyth he was appointed an assistant at Shrewsbury School of Art, and later, in 1908, obtained an appointment in the Government Valuation Office, Dublin, and subsequently, in 1913, a position as assistant architect with the P.W.D., Bombay. Amongst his works may be mentioned a Hostel for Women Students for the Scotch Education Mission and a Church at Jacob's Circle, Bombay. Other works on which he was engaged were the Custom House, Bombay, and the conversion of the Science Museum into a War Hospital. During the war he held a commission in the Bombay Volunteer Artillery and then in the Indian Army Reserve of Officers. Returning to England in 1919 in poor health he resigned his commission in the army and bought a practice at Lewes. He built cottages for the County Council in various parts of Sussex, some private houses at Seaford, and executed various work in Brighton. He was born April 19th, 1880, and died on January 31st this year.

### SIR JOHN SOANE'S MUSEUM.

The Museum opened for 1926 on 2 March. The hours are from 10.30 a.m.—5 p.m. on Tuesdays, Wednesdays, Thursdays and Fridays during March, April, May, June, July and August. At other times admission is granted by cards obtained from the curator.

### R.I.B.A. PAMPHLET ON "THE ARCHITECT AND HIS WORK."

The pamphlet on "The Architect and His Work," compiled by the Practice Standing Committee with the assistance of the late Mr. Paul Waterhouse, Past President, has been issued by the Council with a view to bringing before the general public the functions of an architect and his use to the community.

Members can obtain copies of the pamphlet for circulation to their friends on application to the Secretary, at cost of 2s. 6d. per dozen.

### R.I.B.A. VISIT.

#### NEW PREMISES FOR MESSRS. COURTAULDS, LTD., ST. MARTINS-LE-GRAND.

The visit to Messrs. Courtaulds' new premises on 20 February, arranged by the Royal Institute, was made particularly interesting to the visitors, both old and young, by the architect's lucid description of the building and his narrative of the difficulties encountered in the design and execution of the work. Mr. L. S. Sullivan [F.] and his colleague, Dr. Oscar Faber, O.B.E., were fortunate in that no question of "ancient lights" was joined with other too familiar hampering conditions, as the site of the building is Crown land and free from any restrictions as to rights of light and air. The Dean and Chapter of St. Paul's were very much alive to the possible danger to the stability of the Cathedral from the deep basement of Messrs. Courtaulds' premises. It was feared it would act as a "dam" to the water in the strata through which excavations had to be made. Mr. Sullivan briefly stated what had been done to set at rest the natural anxiety of the Cathedral authorities, but no details of the foundation work were given owing to the regretted absence of Dr. Faber, who was responsible for the scheme. Anyhow we all understood that Messrs. Courtaulds had not added a new peril to St. Paul's!

The height of the front to St. Martins-le-Grand is 80 feet to the top of the main cornice, and the total height of the building 100 feet. On the point of the extra height the London County Council had characteristically strong views. The means by which Messrs. Courtaulds' wishes were met, the integrity of the design maintained, and the requirements of the London County Council carried out to the satisfaction of all parties, were modestly related by Mr. Sullivan and duly noted by the visitors.

The construction of the steel and concrete "dormers" and roof was fully described and the word "dormer" in consequence attained a meaning and the feature an importance certainly not contemplated by the framers of the London Building Act. The *motif* of the elevations is "verticality." Messrs. Courtaulds were insistent that their building should have that characteristic and be individual and in striking, even pleasing, contrast to the "horizontally" treated buildings adjoining.

A visit to the premises or an inspection of the drawings should satisfy everybody that the imposed conditions have been carried out. The vertical lines of the St. Martins-le-Grand elevations terminate in a deeply-coved, carved cornice for the length of the whole front.

At the conclusion of the visit, a vote of thanks was proposed to Messrs. Courtaulds, Mr. L. S. Sullivan, the architect (Dr. Faber,) and Messrs. Holloway Bros., the general contractors, and all who by their work on the building and attendance that afternoon had made the visit so well worth while.

F. T. W. GOLDSMITH [F.].

### LOAN LIBRARY CATALOGUE.

A new catalogue of the Loan Library has recently been compiled, and can be now obtained on application at the R.I.B.A., price 1s. 6d., postage 3d. extra.

## ARCHITECTS AND DIRECT LABOUR WORK.

On the recommendation of the Practice Standing Committee, by whom several enquiries have been received as to the position of the architect in connection with the carrying out of work by direct labour, the Council have authorised the publication of the following statement for the information and guidance of members:

Cases where architects are called upon to design and carry out work by means of labour employed directly, without the engagement of a contractor, are becoming more frequent, especially in the matter of housing work for local authorities.

The Committee offer no comment on the relative advantages of the direct labour and contract systems of construction in regard to good work and true economy—which are open to argument—beyond recognising that in certain cases it may be desirable, even if not necessary in the opinion of the architect, to dispense with a contractor and quite apart from the instances where the client requires that his work be carried out by direct labour.

The Committee consider that the R.I.B.A. should, therefore, now lay down for the guidance of and observance by its members definite principles of practice to be followed in all cases in all work executed by direct labour, and recommend the Council to approve and to take steps to promulgate as widely as possible the following:—

IN ALL CASES WHERE A CLIENT HAS WORK CARRIED OUT  
BY DIRECT LABOUR WITHOUT THE EMPLOYMENT OF A  
CONTRACTOR.

(1) An architect must not order any work or materials without disclosing it is for and on behalf of, and at the sole responsibility for payment by, the named client, who alone is entitled to such trade or other discounts, if any, as may be obtained.

(2) The custom being that an architect should only examine, pass and certify accounts for payment in respect of work designed and/or supervised by him, all payments whether for labour and/or for material *must* be made by the client or his appointed agent, who must not be the architect nor anyone in the architect's employ.

(3) The client, or his appointed agent as above, must be entirely responsible for and undertake all the obligations and liabilities, statutory or otherwise, in regard to labour, plant and other matters which would devolve on a contractor if one had been employed; the architect cannot and must not relieve his client thereof nor must he act in any way or at any time in the capacity of a building contractor.

(4) The extra services performed by an architect where no contractor is employed must be remunerated additionally to the appropriate customary scale commission on the total final cost of the work carried out, either on the basis of skill and time taken or by special agreement.

(5) It is the duty of an architect to acquaint his client in writing at the earliest opportunity that the client's full acceptance of an acquiescence in the terms above set out are essential conditions precedent to the architect's being in a position to undertake any work in which no contractor is to be employed.

## THE R.A. AND THE R.I.B.A.

Sir Frank Dicksee, President of the Royal Academy, and Mr. F. L. Griggs, A.R.A., have just been elected respectively to the Honorary Fellowship and the Honorary Associateship of the R.I.B.A.

## SCHOOLS OF ARCHITECTURE.

The Council of the Royal Institute, acting on the recommendation of their Board of Architectural Education, appointed in 1924 a Visiting Board to visit and assist those Schools of Architecture throughout the country applying for exemption from the R.I.B.A. Examinations or whose courses are recognised by the R.I.B.A. for the purpose of exemption from its examinations.

The Visiting Board is composed of the Chairman of the Board of Architectural Education, who acts as Chairman of the Visiting Board, a Vice-Chairman, the Honorary Secretary and a Teaching Member of the Board of Architectural Education. In addition, one of H.M. Board of Education's Inspectors accompanies the Visiting Board upon its visits to those Schools of Architecture which have official relations with H.M. Board of Education.

The Council of the R.I.B.A. have now received from the Board of Architectural Education a report of the action taken, as a result of the reports of the Visiting Board, by the schools visited during the last two years.

The following schools are included in the report:—

The Architectural Association School of Architecture  
University of Manchester School of Architecture.

The Northern Polytechnic, Department of Architecture  
Surveying and Building.

University of Cambridge School of Architecture.

University of Liverpool School of Architecture.

Edinburgh College of Art, School of Architecture.

Royal West of England Academy School of Architecture, Bristol.

The Technical College, Cardiff, Department of Architecture.

University of London, Bartlett School of Architecture.

The reports from the various schools show that the suggestions made by the Visiting Board have been found to be of great value, and the Board of Architectural Education have received numerous letters from the schools visited expressing gratitude for the helpful action of the Visiting Board.

## STUDENTS' EVENING AT THE R.I.B.A.

A Students' Evening was held on Tuesday, 23 February in the Galleries of the Institute, where the architects' working drawings of the following buildings were exhibited:—

Devonshire House.

A House at Hampstead Garden Suburb.

Building for Courtaulds, Ltd.

kindly lent by Mr. Thomas Hastings and Professor C. H. Reilly, Messrs. Hennell and James, and Mr. L. Sylvester Sullivan respectively.

About ninety students attended, and Professor C. H. Reilly, assisted by Mr. J. Eaton, Mr. C. H. James, and Mr. L. Sylvester Sullivan, assisted by Mr. Robert Edwards, explained the special points of interest in the respective buildings.



## Notices

### THE TENTH GENERAL MEETING.

The Tenth General Meeting (Ordinary) of the Session 1925-26 will be held on Monday, 15 March 1926, at 5 p.m., for the following purposes:—

To read the Minutes of the General Meeting (Ordinary) held on 1 March 1926; formally to admit members attending for the first time since their election or transfer. To read the following paper, "The Making of a Museum," by Mr. George H. Duckworth, C.B., F.S.A.

### TESTIMONIES OF STUDY EXHIBITION.

An Exhibition of the Testimonies of Study Designs submitted by candidates for the R.I.B.A. Final Examination will be held in the R.I.B.A. Galleries from Saturday, 12 March, to Saturday, 13 March 1926, inclusive. The exhibition will be open daily between the hours of 9 a.m. and 8 p.m. (Saturdays, 5 p.m.).

### VISIT TO DEVONSHIRE HOUSE BUILDINGS.

A visit has been arranged by the Art Standing Committee in conjunction with the Architectural Association, to take place on Saturday afternoon, 20 March, to the new Devonshire House buildings. Members desirous of taking part are requested to make early application to the Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### ELECTION OF MEMBERS, 7 JUNE 1926.

Associates who are eligible and desirous of transferring to the Fellowship Class are reminded that if they wish to take advantage of the election to take place on 7 June 1926, they should send the necessary nomination forms to the Secretary R.I.B.A., not later than 27 March 1926.

### EXHIBITION OF GARDEN DESIGNS.

It is proposed to arrange an exhibition of drawings, plans and photographs illustrative of garden design in the R.I.B.A. Galleries during April 1926. It is hoped that the exhibition will include designs of gardens, both old and modern, public and private, British and Continental.

The exhibition will run from 7 to 21 April 1926, and a lecture on "Garden Design" will be given by Mr. F. C. Thomas, F.S.A., on the 14 April at 5 p.m.

Members of the R.I.B.A. who have in their possession plans, photographs and drawings (measured or otherwise) which are suitable for this exhibition are invited to send them in for the consideration of the Selection Committee. The following conditions should be carefully noted:—

1. The exhibition is intended primarily to be one of garden design and planning, but illustrations of garden architecture and ornaments such as orangeries, pergolas, and statuary, may be submitted if desired.

2. Exhibits should be in reasonably good condition for exhibition purposes.

3. Photographs should be as large as possible (unless they are submitted merely to illustrate a plan) and should be mounted. They need not be framed.

4. All exhibits should be clearly marked with their title and the owner's name and address.

5. Exhibits must be addressed to the Secretary R.I.B.A., and must be received by him not later than 20 March 1926.

6. All exhibits will be insured against all risks while in the possession of the R.I.B.A.

### ROOMS FOR ARBITRATIONS, ETC.

Convenient rooms for arbitrations, etc., are now available for hire at No. 28 Bedford Square, W.C.1, at a fee of £2 2s. per day. All enquiries with regard to vacant dates, etc., should be addressed to Mr. C. McArthur Butler at that address.

### ADVERTISEMENTS IN THE R.I.B.A. JOURNAL.

The attention of all members of the R.I.B.A. is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. An increase in the income derived from such advertisements is a help to the financial position of the R.I.B.A. and an advantage to all its members. The circulation of the JOURNAL is world-wide, and going, as it does, to more than 6,000 architects in almost every part of the Empire, its potential value as an advertising medium is unequalled.

### NOTES FROM THE MINUTES OF COUNCIL

15 February 1926.

#### EXHIBITIONS OF DOMINION, COLONIAL, AND INDIAN ARCHITECTURE.

On the recommendation of the Exhibition Joint Committee it was decided to hold an Exhibition of Dominion and Colonial Architecture in the R.I.B.A. Galleries in the autumn of 1926 and an Exhibition of Indian Architecture in the spring or autumn of 1927.

#### EXHIBITION OF GARDEN ARCHITECTURE.

On the recommendation of the Art Standing Committee the Council authorised the expenditure necessary for the organisation of an Exhibition of Garden Drawings and Photographs from 7 to 21 April 1926.

#### LONDON ARCHITECTURE MEDAL.

On the recommendation of the Art Standing Committee it was decided to amend the Conditions of Award of the London Architecture Medal. The revised conditions will be published in due course.

#### LONDON SQUARES AND OPEN SPACES.

On the recommendation of the Town Planning and Housing Committee it was decided to approach the London County Council with a view to their including in a General Powers Bill certain new powers with regard to squares and open spaces in London.

#### ALLIED SOCIETIES.

The Rhodesian Institute of Architects was admitted as an Allied Society of the R.I.B.A.

#### THE BRITISH ARCHITECTS' CONFERENCE 1926.

A provisional programme for the British Architects' Conference to be held in London from 14 June to 19 June was approved, and a Grand Committee and an Executive Committee were appointed for the purpose of organising the Conference.

#### PROBATIONERSHIP OF THE R.I.B.A.

On the recommendation of the Board of Architectural Education the School Certificate of the University of Durham was included in the list of examinations recognised.

## STUDENTSHIP OF THE R.I.B.A.

On the recommendation of the Board of Architectural Education the following probationers were elected as students of the R.I.B.A. :—

Bond, G. H. : 22 Norland Square, Holland Park, W.11 [Architectural Association].

Curtis, R. H. C. : 52 Ravenscroft Avenue, Golders Green, N.W.11 [Architectural Association].

Drummond, James : "Lynwood," Kinghorn, Fife [Edinburgh College of Art].

Jones, W. R. : 11 Merton Grove, Bootle, Liverpool [University of Liverpool].

Lardy, E. A. : 34 West End Park Street, Glasgow [Glasgow School of Architecture].

Wilson, E. D. : 31 Cambridge Street, W.2 [University of Sydney]. (Special exemption.)

## R.I.B.A. MAINTENANCE SCHOLARSHIPS.

The following members were appointed to serve on the R.I.B.A. Maintenance Scholarships Committee :—

Sir Banister Fletcher.

T. H. Lyon.

T. G. Lucas.

H. P. G. Maule.

F. G. Troup.

## LONDON COUNTY COUNCIL GENERAL POWERS BILL, 1926.

It was decided that a Petition should be lodged in opposition to the London County Council General Powers Bill 1926 in respect of the powers which were sought in connection with new Regulations for Reinforced Concrete Buildings and Drainage.

## ARCHITECTS AND DIRECT LABOUR WORK.

On the recommendation of the Practice Standing Committee it was decided to publish a statement in the JOURNAL with regard to cases in which architects are called upon to design and carry out work by means of labour employed directly, without the engagement of a contractor.

## R.I.B.A. FORM OF CONTRACT, 1909.

On the recommendation of the Practice Standing Committee it was decided to publish a note in the JOURNAL advising members to make certain amendments in Clauses 20 and 21 of the 1909 Form of Contract.

## THE CUBING OF BUILDINGS.

On the recommendation of the Practice Standing Committee it was decided to issue a brochure on "The Cubing of Buildings," illustrated by line diagrams and accompanied by a schedule of current prices to be revised annually.

## THE CONTRIBUTORY PENSIONS ACT, 1925.

On the recommendation of the Architects' and Builders' Consultation Board it was decided that in view of the obligations which will be placed upon building employers in the matter of contributions for their employees by the Widows, Orphans and Old Age Contributory Pensions Act which came into force on 4 January 1926, members should be advised to include an amount as a separate item in Bills of Quantities to cover liabilities arising from the requirements of this Act in continuation of the existing practice with regard to other insurance provisions.

## TENDERING.

On the recommendation of the Architects' and Builders' Consultation Board it was decided to direct the attention of architects to the fact that cases are occurring where architects are not allowing sufficient time for the preparation of tenders.

## ARCHITECTURAL COMPETITIONS.

On the recommendation of the Competitions Committee it was decided to publish a statement in the JOURNAL with regard to the duties of assessors and the position of competitors, and to summon a Special General Meeting for the purpose of considering certain proposed amendments in the "Regulations for the Conduct of Architectural Competitions."

## MEMBERSHIP.

The Council approved the nomination of :

10 candidates for the Fellowship.

33 candidates for the Associateship.

1 candidate for the Hon. Associateship.

The following were elected as Licentiates under Section III (f) of the Supplemental Charter of 1925 :—

Charles Frederick Ellis.

Alfred Hendy, P.A.S.I.

Francis Norcott Hornibrook.

William John Horton.

Douglas Norman London.

James Massey.

John Gould Oliver.

Thomas Shepard, jun.

Frederick Sutton Smith, P.A.S.I.

John Taylor.

## REINSTATEMENT.

Mr. D. W. Ayre was reinstated as an Associate.

## SUBSCRIBERS.

The following were elected subscribers of the R.I.B.A.

Miss Constance Alice Baily.

Brough Gurney-Randall.

## RESIGNATIONS.

The resignations of the following members were accepted with regret :—

G. Anderton [L.].

John F. McIlwraith [L.].

C. J. Ashworth [L.].

C. B. Reid [A.].

F. R. Chalmers [L.].

C. J. W. Simpson [L.].

H. H. Danby [L.].

G. W. Tanner [L.].

Frederick Harrison [L.].

D. Thompson [L.].

Charles King [L.].

C. Ll. R. Tudor [L.].

## THE SMOKE ABATEMENT LEAGUE.

The Council extended the patronage of the R.I.B.A. to "The Universal Smoke Abatement Exhibition" and Conference to be held at Birmingham in September 1926.

ARCHITECTURAL COMPETITIONS :  
ASSESSORS' AWARDS.

All architects who take part in architectural competition are reminded by the Council of the R.I.B.A. that participation in a competition is a definite acceptance of the principle that the award of the assessor is final and binding upon themselves as well as upon the promoters, and that any



competitor who feels that he has real ground for dissatisfaction with an assessor's award should communicate with the Secretary of the R.I.B.A.

Further, all architects, whether competitors or otherwise, are reminded that discussion of correspondence in the public or professional Press which tends to criticism or disparagement of an assessor or award cannot alter the legal and binding effect of that award, but may prejudice architects and the whole competition system in the opinion of the public, and is, therefore, highly undesirable.

#### THE CONDUCT OF ARCHITECTURAL COMPETITIONS.

The Council of the R.I.B.A. desire to remind all architects who may be appointed to act as assessors of architectural competitions that observance of the following points is vitally important for the satisfactory conduct of competitions :—

1. While the R.I.B.A. are prepared to advise the assessor necessary on the general regulations governing the conduct of competitions, the assessor alone is responsible :

(a) For the drafting and presentation of any particular conditions and instructions and replies to competitors ;

(b) That the general regulations are not infringed therein.

2. Inasmuch as assessors' awards will necessarily be legal and binding on all parties, assessors must refrain from emitting any design—however high its architectural merit may be in their opinion—which contravenes any of the conditions and replies which they have themselves laid down up for observance by competitors, and thus avoid any ground for legitimate criticism of their awards after publication.

3. *Accordingly the value and importance of drafting conditions and replies to questions so as to leave the maximum latitude to competitors in the solution of the problem should not be overlooked.*

## Competitions

### PROPOSED ISOLATION HOSPITAL FOR INFECTIOUS DISEASES AT DONCASTER.

The Doncaster Town Council invite architects to submit designs in competition for the Isolation Hospital for Infectious Diseases, proposed to be erected on a site off Skhill Road and Common Lane, Doncaster. Architects competing must be established in private practice. Assessor, Mr. T. R. Milburn [F.]. Last day for questions March 1926. Designs to be sent in not later than May 1926. Premiums, £200, £100 and £75. Conditions may be obtained from the Town Clerk, Town Hall Office, Doncaster, by depositing £1 1s.

### COMPETITION FOR NEW OFFICES, WEST BROMWICH.

New offices for the West Bromwich Permanent Benefit Building Society. Open to architects practising within 10 miles of Birmingham. Assessor, Mr. W. Alexander Harvey [F.]. Premiums, £100, £75 and £50. Last day for designs, 31 March 1926. Conditions may be obtained from Mr. John Garbett, the Secretary, West Bromwich Permanent Benefit Building Society, 301 High Street, West Bromwich.

### DOWNHAM MARKET U.D.C. HOUSING SCHEME AND SCHEME FOR BUILDING LARGE RESIDENCES : CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competitions are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competitions.

### MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

### TOPSHAM PUBLIC HALL COMPETITION.

Premiums of £50, £40 and £30 respectively are offered in the above competition. Assessor, Mr. Walter Cave [F.]. Last day for questions, 1 January 1926. Designs to be sent in by 1 April 1926. Conditions may be obtained from the Clerk to the Parish Council, Topsham, by depositing £1 1s.

### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

### LEAGUE OF NATIONS.

#### COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

#### CHINGFORD COUNCIL OFFICES COMPETITION

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

#### AUSTRALIAN WAR MEMORIAL—CANBERRA.

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon, on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2

#### AUSTRALIAN NATIONAL WAR MEMORIAL AT VILLERS BRETONNEUX.

The date for the delivery of designs in connection with this competition has now been extended from 30th April to 31st May 1926.

#### A.B.S. SCHEME OF INSURANCE.

The A.B.S. specialises in Life Assurance. In Whole Life Assurance the sum assured and bonus are payable at death and the payment of premiums normally continues throughout life. The bonuses which are usually payable with the sum assured may be surrendered for cash, applied to the reduction of future premiums or used to reduce the period over which premiums are payable. The Society is not tied to any insurance office and is prepared to offer and advise upon a wide choice of policies in leading companies. Half the initial commission is returned to the assured in the form of rebate and the other half forms a direct contribution to the Society's funds.

Please address all enquiries to the Secretary, Architects' Benevolent Society, 9 Conduit Street, W.1. Telephone: Mayfair 434.

## Members' Column

#### PRACTICE WANTED.

FIRM of architects in South Wales desire to purchase or take over practice within 50 mile radius of Cardiff.—Reply Box 1740, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

#### PARTNERSHIP WANTED.

ARCHITECT, A.R.I.B.A., A.I.Struct.E., in practice in London, desires partnership with established firm. Some capital available.—Apply Box 1726, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

#### PARTNERSHIP WANTED.

ASSOCIATE, with good all-round experience and faded in practice, desires to discuss possibilities, and would if necessary make substantial capital payment for an opportunity to work in collaboration or partnership with a senior having a live practice affording an opening to recover.—Box 2226, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

#### APPOINTMENT VACANT.

A FIRM of Architects, in Manchester, has a vacancy for a Junior Colleague. To a young, thoroughly qualified and ambitious Associate of the Institute, with some local interests, an opportunity is offered to build up a connexion upon economical terms. Subject to mutual satisfaction, a reversionary interest in an old-established practice could be assured.—Apply Box 1826, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

#### PARTNERSHIP.

ADVERTISER under Box No. 2216 in the JOURNAL of 6 February wishes to thank the applicants, and regrets that it is impossible to answer each one individually owing to the number received. Applicants placed on the short list have been communicated with.

#### NOTICE.

MESSRS. J. S. GIBSON and GORDON have taken into partnership Mr. James M. Wilson, and will continue to practise at 50 Bond Street, W.1.

#### OFFICE ACCOMMODATION.

USE of architect's offices in the Temple offered by L.R.I.B. Drawing office and private room, fully equipped in every way. Apply Box 2226, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

#### CHANGE OF ADDRESS.

MR. C. D. ALDERIDGE, D.S.O., T.D., A.R.I.B.A., A.M.I.Struct.E., has changed his office address from 15 Bowlalley Lane to Imperial Chambers, Bowlalley Lane, Hull. The telephone number Central 4649 remains the same.

## Minutes IX

At the Ninth General Meeting (Ordinary) of the Session 1925-26, held on Monday, 1 March 1926, Mr. E. G. Dawber, F.S.A., in the chair. The attendance book was signed by 18 Fellows (including 5 members of the Council), 13 Associates (including 1 member of the Council), 2 Licentiate (including 1 member of the Council), 2 Hon. Associates and a large number of visitors.

The Minutes of the meeting held on 15 February 1926, having been taken as read, were confirmed and signed by the Chairman.

The Hon. Secretary announced the decease of:—

Mr. John Harold Kennard, elected Associate 1910, Fellow 1921.

Mr. Richard Wellings Thomas, elected Fellow 1906.

Mr. Leonard Harris Dutch, elected Associate 1894.

And it was RESOLVED that the regrets of the Institute for the loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

Lt.-Col. H. W. G. Cole, C.S.I., O.B.E., having read paper on "The Paris Exhibition of 1925," and illustrated it with lantern slides, a discussion ensued, and on the motion of Sir William H. Clark, K.C.S.I., C.M.G., Comptroller-General of the Department of Overseas Trade, seconded by Sir Charles Walston, Litt.D. (Hon. Associate), a vote of thanks was passed to Lt.-Col. Cole by acclamation, and was briefly responded to by the Chairman.

The meeting closed at 10.10 p.m.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

#### R.I.B.A. JOURNAL.

Dates of Publication.—1926: 6th, 20th March; 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

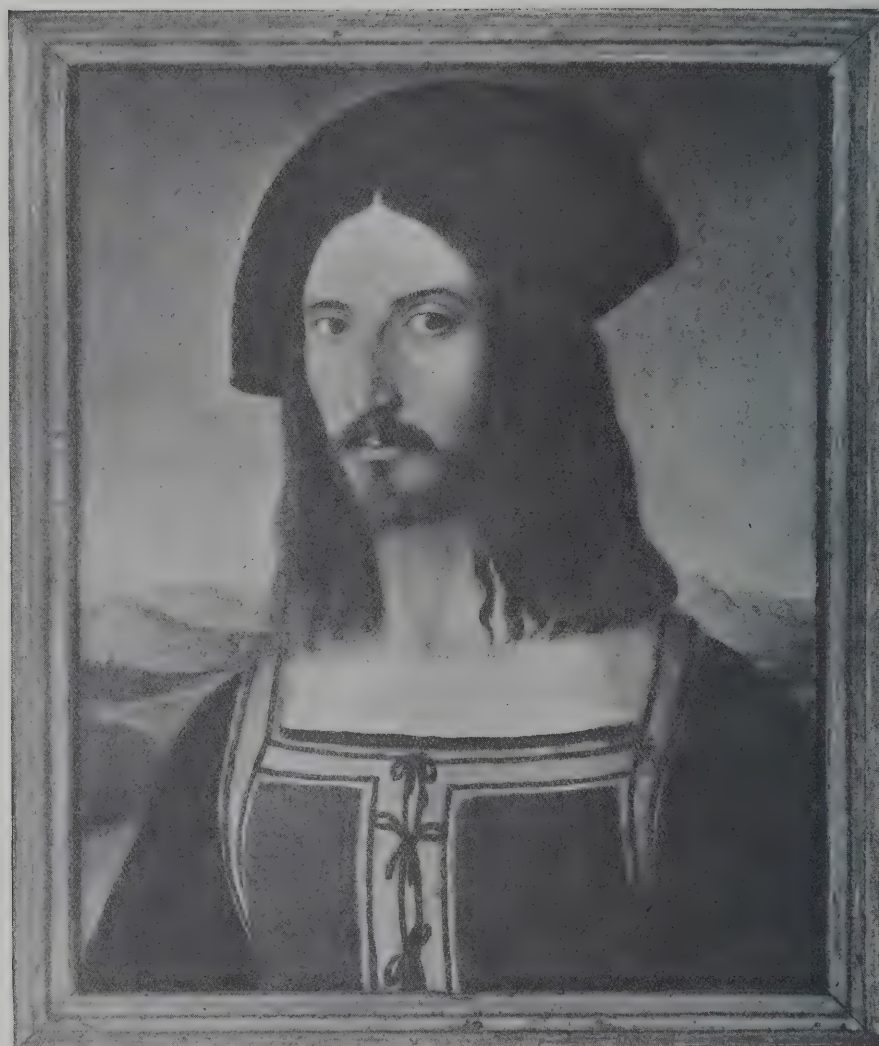
VOL. XXXIII. No. 10

THIRD SERIES

20 MARCH 1926

## Contents for 20 March 1926

	Page
FRONTISPIECE. BALDASSARE PERUZZI OF SIFNA .. .. .	<i>To face</i> 299
THE LIFE AND WORK OF BALDASSARE PERUZZI OF SIFNA—illustrated, By J. Hubert Worthington .. .	299
ARCHITECTURE FROM THE STRUCTURAL POINT OF VIEW. By A. E. Richardson .. .. .	307
REVIEWS :	
TERRA-COTTA OF THE ITALIAN RENAISSANCE. By F. R. Hiorns .. .. .	312
L'ARCHITECTURE DES PAYS-BAS MERIDIONAUX AUX XVIe, XVIIe ET XVIIIe SIECLES. By Charles E. Sayer .. .	313
ARCHITECTURAL CONSTRUCTION. By Sidney Toy .. .. .	313
NICOLAS HAWKSMOOR. By C. J. Tait .. .. .	314
ROMAN ARCHITECTURE. By Theodore Fyfe .. .. .	315
MEWASH AS A STONE PRESERVATIVE .. .. .	316
THE ST. ALDATE'S SITE AT OXFORD .. .. .	317
THE WREN SOCIETY .. .. .	317
WATERLOO BRIDGE .. .. .	317
OLD BRIDGES OF FRANCE .. .. .	318
LEGAL :	
ARCHITECTURAL COPYRIGHT. By J. Douglas Scott .. .. .	318
LOCAL AUTHORITIES AND QUALIFIED ARCHITECTS .. .. .	318
DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH .. .. .	319
I.B.A. MAINTENANCE SCHOLARSHIPS IN ARCHITECTURE .. .. .	319
ALLIED SOCIETIES :	
YORK AND EAST YORKSHIRE .. .. .	319
NORTHERN ARCHITECTURAL ASSOCIATION .. .. .	320
BIRMINGHAM ARCHITECTURAL ASSOCIATION .. .. .	320
BIBLIOGRAPHY :	
HENRY LESLIE PATERSON .. .. .	321
JOHN WAYLAND BENWELL .. .. .	321
RICHARD WELLINGS THOMAS .. .. .	321
THE SOCIETY OF ARCHITECTS : DISPOSAL OF ASSETS .. .. .	322
NOTICES .. .. .	322
COMPETITIONS .. .. .	323
I.B.S. SCHEME OF PROFESSIONAL INSURANCE .. .. .	324
MEMBERS' COLUMN .. .. .	324
MINUTES .. .. .	324
K .. .. .	



BALDASSARE PERUZZI OF SIENA  
(From an oil painting by himself)

*(Published by courtesy of the Architectural Book Publishing Co., New York)*





CHAPEL OUTSIDE THE PORTA CAMOLLIA, SIENA

## The Life and Works of Baldassare Peruzzi of Siena\*

BY PROFESSOR J. HUBERT WORTHINGTON, M.A.

PERUZZI enthusiasts have been eagerly looking forward to the publication of Mr. Kent's book on "this most excellent master," and we have, at last, a volume that deals in detail with his life and works. When one reflects on the influence of the great architects of the Renaissance in Italy, it is curious to find how inadequately Brunelleschi, Bramante, Peruzzi and Antonio San Gallo il Giovane have been recorded. It is true that, in a general way, Anderson, Sir Reginald Blomfield, and Geoffrey Scott have opened our eyes to the peculiar genius and significance of these giants, and learned essays have appeared from time to time in the professional

Press, but monographs are hard to find. He who would study the Renaissance architects must search far and wide for his information among the buildings of Italy in the gossip pages of Vasari, in the Uffizzi drawings, in the libraries of far off hilltowns or the pages of such books as Leterouilly,† whose plates are often more accurate than his statements of authorship. Sanmicheli has a fairly complete record,‡ Geymüller§ has done nobly for Raphael, but even in generally accepted text books one must be guarded in accepting claims of authorship.

For these reasons the publication of this life of Baldassare Peruzzi of Siena is important to those who wish to go more deeply into the subject than is possible in a general volume.

\* *The Life and Works of Baldassare Peruzzi of Siena*. By William Winthrop Kent, Member of the American Institute of Architects, The Architectural League of New York. Published by Architectural Book Publishing Co., Inc., Paul Senzel and Maurice Krakow, New York.) 30s. net.

† *Édifices de Rome Moderne*.

‡ *Le Fabbriche di Michele Sanmicheli*. By Rouzani e Locioli.

§ *Raffaello Sanzio Studiato come Architetto*. Geymüller.

In these days the question will arise, "Of what value is scholarship to the creative architect?"

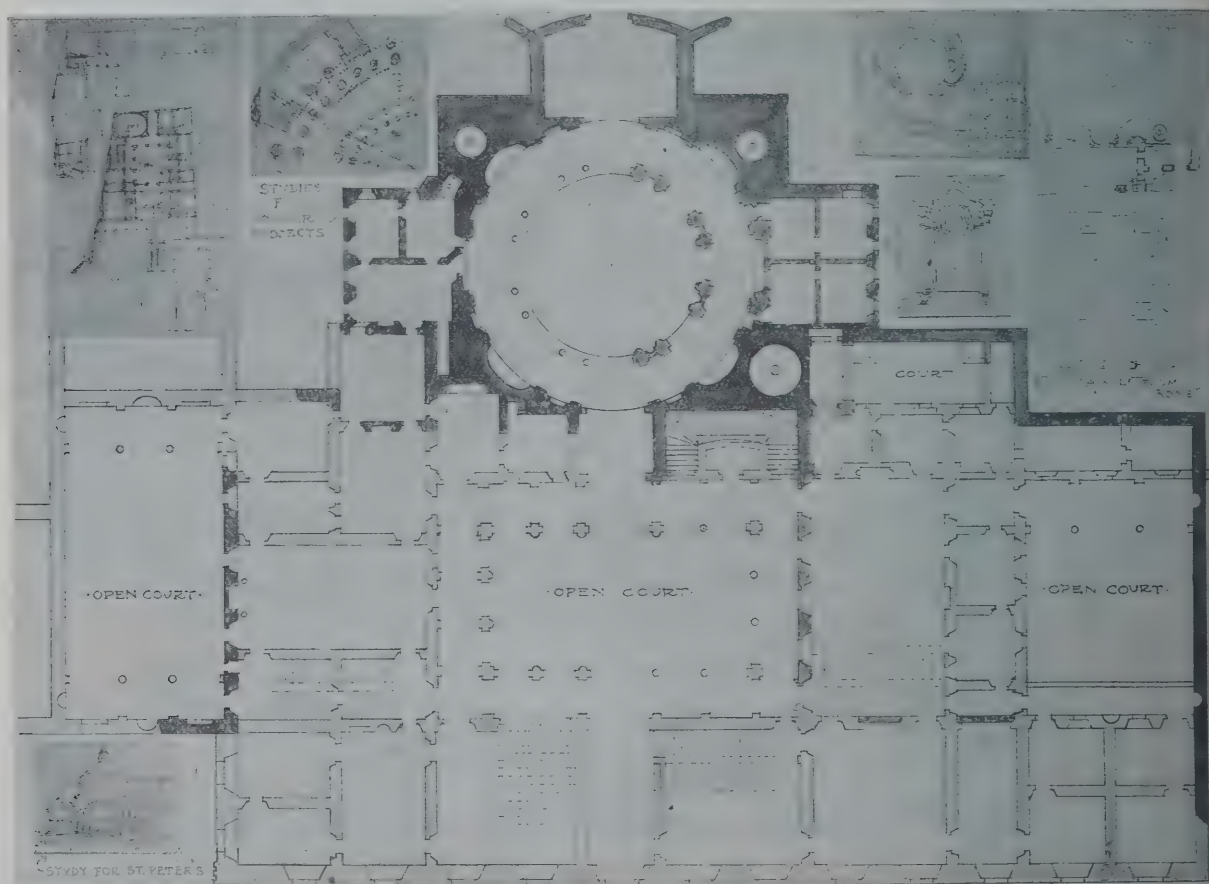
It is frequently said that learning has been the bane of our modern practice, that our architectural scribes and pharisees have lost the spirit of creative expression, that our neo-classicists are as fanatical about their classicism as the neo-gothicists of the last century were about their gothicness.

The cry goes forth "Let us throw learning to the winds, let us be free, let us express ourselves in the solution

seriously about this question of study, real study, not the cramming of indigestible and unnourishing facts and formulas, but the deep, searching, psychological enquiry into the work and methods of an acknowledged master of our craft, and none will deny the claim of Baldassare of Siena to be a subject worthy of earnest and painstaking research.

There are no short cuts to knowledge. What we obtain cheaply we esteem lightly.

Overmuch generalisation leads to no definite goal



PERUZZI'S PLAN FOR A PALACE FOR CONTE DI PITIGLIANO, ON THE RUINS OF THE BATHS OF AGRIPPA, ROME  
(From Uffizzi)

of the problem, in truthful buildings of steel and glass and concrete. Let us study plan and plan expression—let us see things in the round, and keep only to elements and principles to guide the free soul of modernist man, freed from pedantry and cant and palladian rule and insignificant ornament, and be true to our instincts and our twentieth century."

Yes, there is much in this. The war caused most of those whom it touched deeply to try and shed their shibboleths and get down to a bed-rock basis.

But sometimes it is well to retire awhile and think

and every serious aspirant to architectural fame should justify his student period by making some contribution to knowledge, both for his own sake and the sake of others. Sketching and measuring tend to be too sporadic. It is easy to flit too readily from flower to flower. As Thomas Hardy says in one of his novels, "In these days, the secret of productive study is to avoid well."

The curriculum of our modern schools is framed on a course of study so complete, so logical in its all-round comprehensiveness, that one wonders how the normal brain can absorb such diverse food. Some specialise





FROM PERUZZI'S SKETCH-BOOK—SIENA

study might constitute a good sheet anchor to the heavily-laden brain, tossed in the waves of contradictory aims, and a period is best grasped by detailed study of one man or one building.

There is no need for Peruzzi to be introduced to the English architect. His name has been praised by many a facile pen. We accept him as we accept Wren. A child of misfortune in his lifetime, he has come into his own with the passing of the centuries.

The book under consideration is not a long one, for there are only sixty-two pages of letterpress, but the bibliography and list of works add very materially to its value. One cannot help wishing that the book could have been a folio containing large scale measured drawings and photographs, and facsimile reproductions of the Uffizzi drawings. There are ninety plates of illustrations, but four different buildings on a page 9 inches by 6 inches seems a little crowded. It must be remembered, however, that in a book of general reference to the subject it was important that as many buildings as possible should be represented, but its limitations in this respect must be accepted, and search made in supplementary sources.

The illustrations consist mostly of photographs of buildings and pictures, and reproductions of some thirty of Peruzzi's drawings in the Uffizzi. There are only one or two examples from the Siene sketch book. Plate 43 contains two interesting drawings for S. Peter's that are unfamiliar, and there are two drawings from the Metropolitan Museum, New York. Perhaps the dominating impression left on the mind by this rich series of examples from Peruzzi's own hand, is his uncomparable skill as a planner. The studies for concentric churches seem infinite in variety and explain the development that culminated in his plan for S. Peter's.

But of all the illustrations, the self-portrait of the master, that forms the frontispiece, gives a surprise and delight surpassing all the others. This, we are told, was probably painted during the intimacy of Raphael and Peruzzi in Rome before 1515. At the sale of the pictures of the Davanzati Palace and Villa Pia collections, it was sold in 1916 to Warwick House for Jackson Johnson, St. Louis, Mo. It is the only oil portrait of him known, and was found in Northern Italy. The cap is of black velvet, the vest a greenish blue, a colour much favoured by the artist, set off by a border of orange colour and tied up the front with three knots of dark ribbon. The mantle is dark and the shirt edged with lace. The complexion is clear and light, the eyes dark and piercing, the hair, beard and moustache brown. Here is an artist's face, full of a hawk-like penetration, a dignity, a refinement, a sensitiveness to beauty that is in accord with all that a student of Peruzzi's works would expect. Peruzzi the man is brought to life again in this vivid representation. He is in the full vigour of manhood, at the age of about thirty-four, and it is interesting to compare this painting with his pen and ink drawing of himself (title page) from his Siene sketch-book, done at an older and sadder period of his life. Both show the same aquiline nose, the same mobile and sensitive mouth, the same "grave, noble, and commanding aspect" that caused the Spaniards at the sack of Rome to take him for a great prelate in disguise.

In analysing the book it is sometimes difficult to sift the certain work from the doubtful work. The Palazzo Massimi, the Chigi Chapel, and the Farnesina in Rome and the Casa Pollini in Siena—of which the sketch in this book fails to convey the distinctive beauty—are so well known that there is no need to enlarge upon them here. Peruzzi's reputation is safe with them, and with his plan for S. Peter's and his well-known drawings in the Uffizzi and the Siena Library, which show us what the world has lost by his lack of greater opportunity.

His frescoes in the Farnesina and the Ponzetti Chapel in Rome, his decorations at Belcaro, and his portraits of himself and Alberto Pio, substantiate his claim to be the greatest painter among the architects. These are accepted without question. But there are a number of lesser works scattered throughout Italy which are not so familiar and which make many challenges to the keen student. It must be admitted that there is a remarkable inequality in the work which has been accredited to Peruzzi. Like Leonardo da Vinci, his influence was far greater than his achievement. Many of the buildings ascribed to him were either the work of immaturity, or were executed in his absence by others, or were finished after his death by less capable hands. Recent research has definitely disproved all possibility of authorship of some buildings that were associated with his name for many years.

The Church of the Servi and the Villa Columba as it stands, both at Siena, Sta. Elisabetta at Viterbo, and the Palazzo Fiorelli at Bologna, are buildings that one hopes that Peruzzi had little share in—if, indeed, he had any.

The famous concentric Church of Sta. Maria della Consolazione at Todi may owe its initial conception to Peruzzi's genius, but this is supposition. The problem of the Palazzo Albergati at Bologna, superb fragment though it be, is not really disposed of, though Mr. Kent's analogy of the small ground floor windows with those of the Villa Mieli at Siena, is an interesting addition to the arguments in favour of Peruzzi's association with this great building, which was, of course, mainly built after his death. But Vasari does not mention it, Burckhardt says that the windows and right door were built by Battista di Piero of Como in 1519, that the main cornice is dated 1584, and the great left door, which was to have formed the centre of the front, 1612.

Dr. Albrecht Haupt suggests that Peruzzi's pupil Sebastian Serlio, of Bologna, was probably in the main responsible, giving 1540, four years after Peruzzi's death, as the date. Serlio admits his debt to Peruzzi, but whether this building should be definitely included in a list of Peruzzi's works is another matter.

But, on the whole, Peruzzi comes well out of the exhaustive researches of Mr. Kent. In spite of Geymüller's specious pleading in favour of Raphael, English authorities are almost unanimous in agreeing with the author of this book that Peruzzi was without doubt the architect of the Farnesina and its attendant buildings, and the same may be said of the Chigi Chapel. His share in the Pentagon at Caprarola is convincingly demonstrated.

Peruzzi, as is well known, suffered heavily from the misfortunes that seldom escape the more sensitive, modest, and unworldly exponents of our complex and exacting calling. In such a sparkling and bombastic age,



where wealth, display and success counted for so much, it is not surprising that much of his work, particularly in the provinces, had to be done in the cheapest manner and in the humblest materials. He was beset by all those

genius in the hard field of experience, for few architects soar to immediate maturity in their first attempts.

One of his first buildings is unquestionably the Villa Chigi, or Mieli, near Siena, to which Mr. Kent gives



Fresco in the Ponzetti Chapel  
Santa Maria della Pace, Rome

limitations of which the architect seldom fails to complain. Yet he had that unusual gift of style, the power to fill small things with an imposing dignity and grace.

Certain lesser known buildings, however, need a fuller analysis in order that we may trace the unfolding of his

the date 1505, which would make its author twenty-four years of age. Although it is full of faults and crudities and, like so many of his buildings, has suffered from neglect, yet we find in it many of the features that became common in his more mature works. The

whole conception of the plan, with its central block and loggia and its two projecting wings, gives the germ of the Farnesina, begun four years later. One of the façades, not illustrated in this book, has the same angle pilaster treatment as the Vigna di Papa Giulio at Rome. The windows of the *piano nobile* have the same character as those of the Casa Pollini and the Palazzo Ricci; those of the ground floor are the prototypes of the Palazzo Albergati, and the windows in the deep frieze foreshadow those of the Farnesina and the Casa Pollini.

Yet, though all these points are of fascinating interest to the student who wishes to probe into the evolution of Baldassare's mind, it must be admitted that there is a curious haphazardness in the work that it is hard to reconcile with the maturer work of this incomparable stylist. One may instance the feeble placing of windows near the main angles of the building, the sham windows, the inadequacy of the entablature on the pilastered front, the portone arch all out of centre, and a lack of balanced rhythm.

The Villa Belcaro, also near Siena, was probably his last work near his native town, for it was done in the years 1532-35, just before the Palazzi Massimi. It can hardly be assumed that he did not personally supervise the work, for Mr. Kent reproduces his careful and obviously authentic plan of the villa, full of his exquisite and unmistakable notes and dimensions.

Superbly placed on its hill, surrounded by its delightful little rampart and the great ilex hedge 45 ft. thick, this castellated casino has a somewhat flat and sterile inadequacy, particularly in the detail of the pediments over the arches to the garden and the central pozzo recess. The famous fresco of the Judgment of Paris is in the villa itself, so the latter cannot well have been finished after Peruzzi's death. Yet when you pass through from the courtyard to the garden, the little chapel and the loggia bear no trace of those weaknesses of line and detail that are so evident in the main group. It is impossible to over-state the ghastliness of the restorations of the decorations of this chapel and loggia, although the essential excellence of the design has not been destroyed. They were recently "executed by a distinguished artist from Rome."

The chapel internally is a study in pure form. Plate 20 of this book gives a fair idea of the plan if one apse is eliminated and deep arches are inserted east and west of the dome. It may also be compared with the Ghisilardi Chapel, S. Domenico, Bologna, and the Uffizzi plan, on plate 38.

The dome at Belcaro is 15 ft. 8½ in. in diameter, and the arches on either side are 4 ft. deep. The springing height of this symphony of concentricity is 13 ft. 6 in. The whole is decorated by Peruzzi's own hand. The dome, arches and apse semi-dome have his lozenge panels, and on the wall of the apse graceful and rather elongated figures of saints are grouped round the Madonna and Child. A little door in the apse leads to the charming loggia, with three 12 ft. bays covered with concentric domes, that spring 10 ft. 3 in. above the floor. The scale is admirable. The central dome is painted with an architectural treatment of lozenges and panels filled with classical myth and story, and the side

ones have the open trellis of the Villa Livia and the Villa di Papa Giulio, with the blue sky behind, and fruit and peeping amorini and an infinite variety of the birds of which Peruzzi was so fond.

As a church architect Peruzzi stands for the Greek cross or Rotunda school, and the illustrations in Mr. Kent's book give a very complete idea of this largely unrealised craving. Apart from his many studies for S. Peter's and other churches, the little chapel of the Villa Celsa, near Siena, S. Eligio degli Orefici and the Chigi Chapel in Rome, and S. Sebastiano and S. Giuseppe at Siena, show actual examples in varying degrees of finish, but all small in scale.

The church of San Sebastiano degli Innocenti, in the Via Vallepiana, Siena (plate 6), is superbly situated in a steep hillside. It is somewhat dilapidated and incomplete. It has been attributed to Girolamo Ponsi, but Matas and local tradition give it emphatically to Peruzzi. Although the central dome is only 18 ft. in diameter, and the vaults over the wings of the cross measure only 18 ft. by 12 ft., it is a dignified little interior. The stone pilaster caps are unusual, the detail of cornice and architrave recall the Palazzo Turchi, and in spite of the quaint external finish of the little apses the building is very characteristic and composes well.

It is interesting to compare San Giuseppe (plate 60), in the Via S. Agata, Siena, with San Sebastiano. The entrance front, shown in this illustration, is by Giovannelli, and the real view of the church is from below, where it piles up magnificently from an olive-clad valley. The composition from this side is more imposing than that of S. Sebastiano, for the octagonal dome is 36 ft. across, and the four arms are more subservient to the general mass. The brick lantern is in excellent accord with the flat-pitched roof of the octagon, the drum has oval eyes like the Carmine tower, and there are little windows in the frieze. The interior, though good in form, is dull through lack of finish and detail.

Mr. Kent definitely ascribes the building to Peruzzi, and dates it from 1522 to 1531.

Of his other church buildings in and around Siena, one can only mention the admirable mastery of brick design in the chapel outside the Porta Camollia, (plate 54) and the Campanile of the Carmine Church (plate 70), with a use of doric pilasters, shallow recessed panels, oval windows and excellent cornices. The members are simple and logical, and the details generally may be contrasted with the chapel and tower of the Palazzo Turchi, where the fine, crisp terra-cotta is considerably enriched, and the same cornice moulds are used as in the Casa Pollini and the Bastion. It all goes to prove the fertility of Peruzzi's brain, always pressing on to new solutions and experiments.

One cannot help regretting that the high altar in Siena Cathedral—one of Peruzzi's most accomplished and interesting decorative studies of ornamented mouldings in fine marble, in conjunction with bronze accessories—is not illustrated. It is true that plate 73 shows the preliminary Turin sketch for this altar, but it is almost a caricature, and is as far removed from the consummated work as is the Uffizzi preliminary plan of the Palazzo Pietro Massimi from the finished product. It only goes to prove the



care that Baldassare gave to work that had his personal supervision in execution. Mr. Kent gives its date as 1532, the year of the appointment as Capomaestro of the Duomo. For finish the nearest parallel is the Chigi Chapel. In this question of mouldings a book of this size cannot very well enable the student to realise how far Peruzzi excels his contemporaries in this respect. Lay a sheet of carefully drawn Peruzzi full size details of such work as this altar alongside a sheet of mouldings by Antonio da San Gallo il Giovane, or Sanmicheli, and the point is at once evident. The full value of Peruzzi's

the despatch of the models, and the buildings in question were only completed at a considerably later date, they must be critically considered in the light of the evidence. Of the Duomo (1514), it may be said that Peruzzi was responsible for its final plan and internal proportions, and very little else. He should also be given credit for the interesting nave of the church of San Nicolo, 1517-20, with a clever play of domes and barrel vaults in the nave. The new façade of La Sagra, the old cathedral (1515), is a skin-deep imposition, in a *motif* that became associated with Palladio in the Redentore



VIGNA DI PAPA GIULIO III, VIA FLAMINIA, ROME

contribution to the world can only be grasped by study on the spot.

Mr. Kent has done careful, conscientious research outside the more beaten tracks of Siena and Rome. The chapter and illustrations dealing with Carpi are of particular interest, as, except for Bedford's detailed information, it is ground unfamiliar to English readers.

Peruzzi met Alberto Pio da Carpi in Rome about 1510, and made models for various buildings for him; but as there is no record that our architect ever visited this rather obscure northern town, and we only hear of

and San Giorgio Maggiore, at Venice. It is not a very happy one.

The high portico may be his, he probably built the Rotonda in 1511, an octagonal building, destroyed in the seventeenth century, and his share in the bastioned walls may be elucidated.

Alberto Pio was an enlightened and discriminating prince, and by the Mond bequest last year the National Gallery acquired his portrait, that can be ascribed with fair certainty to Peruzzi. The date is given as 1516. A good example of the architectonic quality

n painting, it bears a close resemblance to Peruzzi's self-portrait. It is a fine thing for an architect to be able to portray his client in this way. Alberto comes well out of the test. He is a great gentleman, with his velvet cap, his costume of sombre black relieved by the decorative cords and tassels of gold. The book and hands, admirably treated, suggest a keen and sensitive personality.

Bologna has been touched on in the reference to the Palazzo Albergati. Of the other work there, the great door of San Michele in Bosco is familiar; but the door and window from the Palazzo Pubblico are not so well known (plate 50). The former has a fine robustness, and the window embodies all those qualities of scale and finesse that characterise the master. The enriched plinth is of particular beauty, and though proofs seem absent, the character of the work seems to justify the assumption of authorship.

But it is hard to admit that the Palazzo Fioresi (plate 49), with the attenuated columns, the weak angle, the thin detail, and the grotesque disproportion of the upper architrave to the cornicione, is by the same hand. The work in the Palazzo Boncompagni is dated well after Baldassare's death, and it is to be hoped that he had no share in it, although it shows traces of his influence.

Let a veil be drawn over Peruzzi's Gothic design for the front of S. Petronio, interesting and authentic though it may be. There are other drawings to be seen in the sacristy there, too.

Of the other Italian centres where Peruzzi left his mark, Montepulciano is perhaps the most important that remain. He added the cornicione and fanciful windows of the top storey of the Palazzo Contucci or del Monte, which the robust and heavy-handed Antonio da San Gallo il Vecchio had begun (plate 83). We see

Baldassare's lighter hand in the charming little cortile of this palace, where the extreme simplification of mouldings shows how cleverly he met a provincial problem, with the money running out. The Palazzo Ricci, in the same town, is an interesting building of stone, unequal in finish. The windows of the *piano nobile* are almost identical with those of the Casa Pollini at Siena, which are unusual for their low proportion, only 6 ft. 8½ in. high to 4 ft. wide. He is also said to have designed a little house, Via Cavour, No. 27, and the house in the Via Ricci, No. 9.

Mr. Kent's book is one that should be studied, not skimmed. It should be read in conjunction with some of our own eloquent and discriminating commentators, and its illustrations should be supplemented by such plates as Leterouilly gives of the Palazzi Massimi in the third volume of *Edifices de Rome Moderne* and those of the Architectural Association Sketch-book. Above all, it should be the inseparable companion of any architect who goes to Peruzzi's Italy, for it is when faced with the actual work that its real value will be most fully proved.

Peruzzi's supremacy among his contemporaries can only be really comprehended by actual contact with his creations, and it must be remembered that he was more than an architect, a master of material, of brick and terracotta, of stone and marble, of stucco and its forms of decoration, of wood-work, of bronze; he was also mural decorator, portrait painter, inventor of movable scenery, military engineer, astrologer, perspective expert, exponent of *terretta* and *sgraffito*.

Those who are prepared to follow up this book by serious work will get from it much that is of real and lasting value. The architectural fraternity owes grateful thanks to Mr. Kent for many years of painstaking study.

(\* \* \* It is desired to make grateful acknowledgments to the Architectural Book Publishing Co., New York, for the illustrations used in this article.)





# Architecture from the Structural Point of View\*

BY PROFESSOR A. E. RICHARDSON [F.]

LIKE many other important issues the subject of architecture is best understood by an appreciation of elemental truths. In this Paper it will be endeavoured to show the necessity for a revision of ideas in order to bring the scientific art into closer touch with modern life.

From the standpoint of construction building has been steadily improving for the past century, but it has just as steadily been losing gracious expression. It is common knowledge that a strong line of demarcation exists between mere building and architecture. If we allow our thoughts to turn to the period when architecture was still vital we find the conventions of the eighteenth century expressing a rigid adherence to classic form, which latter to some extent was complementary to traditional methods of construction. The nineteenth century, on the other hand, encouraged an eclectic taste which aimed at the picturesque, the difference being an attempt to produce style from external form rather than to develop style from cause. We have also to consider the industrial revolution of the nineteenth century. This period was distinguished for the discovery of the properties of steel and the gradual development of skeleton construction veneered with stone and brick. In the Victorian period no one was strong enough to break with tradition, and there ensued a remarkable burst of style exploitation.

At the present time we are still under the spell of obsolescent methods. On the constructional side we are hampered by curious by-laws, and on the æsthetic side by an innate sluggishness which fetters us to consideration of periods, styles, and reproductions. Architects as a body are not wholly to blame for the present position of the arts and crafts. There has been sufficient excuse in professional circles for the energy that has led in turn to the study, and analysis, of first one phase of the antique and then another. To be brief, we of to-day have been forced by the eclecticism of nineteenth century thought to view past art, of every clime and country, as providing an almost inexhaustible store of motives and models from which to retrieve both details and ideas. Such a state of mind was inevitable. We have evidence of its workings in the contemporary architecture and art of Europe and America.

Granted the fact that creative art requires a new stimulus, a vaster view point, and universality, there is yet demanded a reconstruction from the very founda-

tions of the social fabric, which, moreover, must be encouraged to develop gradually.

To demand a new style of building without enquiring into root causes is for all practical purposes as bad as taking ready-made ideas from past styles and from contemporary work in other countries. Then we hear of the alternative method of evolving from tradition. This requires thought, but there is a vast difference between an extension of antique external expressions and correct evolution. It has been necessary to make this comparison by reason of the many painful, but extremely interesting, efforts made in every country in the world to come into line with modern conditions. But there is one important reservation: art itself is an external expression of social conditions, and it cannot be expected to do anything more, except in isolated instances, than serve as a statement of the conditions which it expresses.

On reflection you will agree that two factors are essential to secure emancipation from the half-truths of to-day. The first is the need for a more intimate knowledge of materials and economy in their assembling. And the other implies a closer recognition of the three dimensional theory in design. The first factor embraces materials in current use as well as the possibilities of reconstructed materials, such as concrete. The second factor aims at a stricter regard for structure in the widest meaning of the term. The theory of evolution, in its eclectic and universal sense, is a structural idea; in other words, it is a natural law. The difference between the requisite and the ornamental also must be understood in all its variations. There is no easy path to this knowledge. In like manner the distinction that exists between fine building or architecture, and mere building, or crudity, must be appreciated. Architectural philosophy on this showing might be defined as the unification of the known—that is to say, of all the laws contributed by history and by experiment.

Historic art, on investigation, will be found to have a certain sequence and homogeneity exactly reflecting the tendencies of the various periods of which it is the literature. As the centuries progressed towards our own time art became more heterogeneous, and in the nineteenth century it became unstable and personal. Art which is specialised and individualistic may be truthful of the tendencies of an age, but it is unimportant in a relative sense when the establishment of complete congruity is an ideal. If attention is focussed upon the nineteenth century in England

\*A Paper read before the Institute of Technology, Manchester, on 10 February.

it will be seen that a process of close study, a gradual building up of a repertoire of ideas, based upon precedent—relegated the structural essentials of building to a secondary place. In a small and populous island netted with ways of communication, the gradual suppression of local handicrafts and traditional methods was sure. In their place was imposed the fetish of esoteric style. We as individuals may regret the changes; but we have to look the new conditions in the face. It is useless, you will agree, to attempt to reimpose antique styles upon industrial expansion predetermined by questions of economy. Viewed broadly there are to-day three main developments to be considered by architects. These respectively are housing, industry, and transport. There are the lesser divisions into which building could be grouped and these could be enumerated to include domestic, civic, and ecclesiastical art. Parallel to this latter group could be included that branch of engineering which has a specific bearing on building. There are two other important branches: town-planning and regional development. Now in order to bring about a greater consistency between the various branches of enterprise in which architecture should have the paramount position, it becomes essential to work for closer affinity and co-ordination between these specialised branches. This is just, it is logical, it is true. But the process to-day is beyond the power of the individual. *Reform must be the aim of all interested in the scientific art of building.* Each city and every town has its own particular problem to solve; the argument could be taken further; every village is in a similar position. Therefore, to the study of town planning must be added regional development.

I propose to deal with the chief branches of building in the following order—domestic, civic, and ecclesiastical. It is my intention, moreover, to consider these branches entirely from the modern standpoint.

In the case of domestic architecture, we must try to realise the types of buildings suited to the close streets of towns, the more open suburbs, and the countryside. We have to think of these buildings not as we see them on paper, but in relation to the localities for which they are intended. England is not so far spoiled that we must cease to think and design geographically. To be more explicit, there is an urgent need for architects and builders to understand local materials and to insist on their use. It would be iniquitous to design a standard type of house or bungalow which could be placed in any part of the land, but it must be conceded that standardisation by groups in districts has a certain merit. Simplicity should be the keynote of all domestic building—the plans direct and convenient, the details unobtrusive, and the colour effect subordinate to the scenery. This policy, if rightly followed, does not preclude the use

of concrete, or for that matter any form of reasonable construction, but it does call for architectural skill and judgment. Therefore I commend to your notice the first consideration, which is one of the finest lessons to be gleaned from the past, and that is the need to think and design in regional terms.

For buildings of civic type good manners are essential. Here again it is unwise to exploit this or that style. Buildings of civic importance must have the character of their purposes; the planning must be efficient; the materials suited to the atmospheric conditions; and there must be inherent in the design that attribute of grace and strength which is the very spirit of civic architecture. Contact with the masterpieces of the past will beget ideas, but it is not desirable that the new should exactly reproduce the old.

Buildings of religious character group themselves into a special category. They range from such vast works as the new Liverpool Cathedral to the Parish Church, the sectarian Meeting House and the Parish Hall. For such buildings architects have changed their opinions regarding the use of this or that style. But in the design of buildings of this type structural truth and honesty of expression are essential factors.

Factory buildings, more often than not, merely represent an assemblage of materials arranged without composition or adjustment. In civic engineering we are confronted with the efforts of engineers who undertake works which partly encroach on the province of the architect; almost without exception the effect is far from satisfactory. In the face of such complexity it is unjust to accuse architects of failing to produce works which possess qualities above the ordinary. There are specialists to-day, perhaps far too many, for every type of building. The myriads of small houses and bungalows encountered throughout the country, more frequently than not, are the products of builders who work without any defined notion of what they are about. In no other country can be seen such differences of opinion, such dividing lines between the good, the mediocre and the indifferent. No wonder public opinion is perturbed and anxious for a change. Yet the architecture of to-day exactly reflects the fibres of the social system. For architects and those associated with them the issue of the moment is to differentiate between exactly reproducing old forms which have no structural *raison d'être* and the evolution of expression in building which has a new moral significance. When we consider the subject of fine building we must begin with elemental truths.

The study of the axes of a projected building is the first move in the correlation of construction to design. Here we are on definite ground. The architect must have the intuition of a mathematician with full knowledge of geometry. He must comprehend the purpose of the building he is designing as well as the psychology



of the people for whom it is intended. Such ability can be developed by intensive training. Scheme after scheme must be prepared to familiarise the mind with various plan formations, for in this inheres the matured architect's power. For want of such training the engineer designs from what is called the practical standpoint, and his works more often than not are deficient in sequence and congruity — the difference being crudity of expression in the generality of engineering works and the absence of the persuasive quality of grace. It must also be remembered that imagination transcends mathematics.

The nucleus of the plan, the arrangement of the spaces about the axial lines, the reduction of the axes which are unnecessary, should therefore represent the aim of every deviser of structures. The principle of a sound plan constitutes the very essentials of sound structure, and from thence can be produced the indivisibility of construction and design. This process is in accord with natural laws ; it can be observed in the structure of the body and plants.

The next move is to determine the principal structural points which will express the plan in three dimensions, and at this stage the type of construction which is both economical and purposeful has to be considered. On such a showing it will be seen that construction, or the scientific assembling of materials, is subordinate to the structural idea of efficiency, congruity, beauty, and completeness. This distinction is apt to be overlooked. If the building is to be composed entirely of reinforced concrete the points of support will be comparatively slight, the walling in sympathy, and the junctioning of the parts expressive of the nature of the material employed, irrespective of veneers of marble, woodwork and plaster. Concrete construction in principle is similar to other methods. It is not a plastic material.

Such a line of thought enables an architect to differentiate between mere construction and the embodiment of three dimensioned structure or fine building. If the building is to be constructed of steel, with internal and external faces of brick or stone, the effect will be to increase certain of the perspective qualities, but the principles of structure remain constant from the time the idea is resolved in plan form. Much of the present indecision amongst practitioners on matters of design arises from the difficulties of reconciling two types of construction in one building. • But in architecture under present conditions there must be compromise ; in other words, the choice of the lesser of two evils.

The next step is to plot the walling—that is to say, to allot to the enclosures and spaces, as well as to the principal points of support, the requisite thickness determined by the height of the structure. In early stages of a design this is done by eye, for it is as well at

this point to leave affairs rather free. A mind attuned to logical development in planning never loses sight of the preliminary moves or of the structural weaving of the plan both horizontally and vertically.

We now arrive at a point when the building exists in embryo on paper ; it is projected in three dimensions. In the mind of the trained architect, from the outset, there has existed some transitory and indefinite idea of the ultimate character of the building. This for convenience can be termed the pictorial concept. It is arrived at by the association of many ideas. So the design is carried to the next stage. No longer is it abstract or viewed as a castle in the air. The process of making the indefinite and unknowable a thing of tangibility is being brought to a logical conclusion. Here again the trained mind has an enormous advantage over the undisciplined. There is the vast picture of the buildings of the past to give confidence ; there are the masterpieces of other days to serve as symbols for guidance and discretion. It does not follow we are to copy, but our designs will be all the better if we refer to the outstanding qualities of buildings of all times to ascertain in what particular our own design falls short of the ideal. So far, on paper, the design exists ; it has been built up on a structural basis ; the material side has been considered ; and the general effect, arising from cause, has been outlined. The building is now in the chrysalis stage.

From this point a most exhaustive analysis of the project begins. The accommodation has to be checked ; the proportion of voids to solids in every part of the fabric adjusted ; and calculations made as to the strength of the components. Then is sought the advice of specialists in steel, concrete, heating, hygiene and acoustics. In works of moderate size the architect is competent to make his own calculations, but for buildings of the first rank it is the practice to confer with the engineer or the specialist. Contrary to the general theory it is not possible to enlist the aid of the engineer in the earliest stages of a design. The architect alone must determine the essentials of the structure, and it is safe to say that a building with a good plan is invariably buildable. In other words, illogical construction is inadmissible with sound structure, which, to the architectural way of reasoning, is found in the plan. After all, construction is merely the interpretation of the structural theory in three dimensions. Congruous and artistic expression is the resultant of many minor factors. On this showing design is made up of attributes which must remain in a nebulous state until called into activity by the structural entity of a building. Proportion, rhythm, decoration and character are ancillary to the main theme, but these attributes undoubtedly play a part in the component result. Building, therefore, is a scientific art calling for many minds in its execution, but neverthe-

less it demands from the outset the omniscience of one mind; that of the architect or chief builder. Hence it has been proved time and again that amidst a host of practicalities the architect has proved himself not only an artist but an eminent technician.

It is a little old fashioned to indulge in aphorisms but there is no other way of stressing the points regarding vital building. The first rule therefore to be observed by the architect of to-day, who wishes to be in the movement for reform, can be summarised as follows:—

Pay close attention to *cause* if you would have telling *effect*. The conditions which demand the erection of a building for a specific purpose are the chief items in a problem which is best solved by a mind trained to deal with logical arrangement. Experience has shown that spaces of different size and shape can be disposed in sequence. The dominant axes of these spaces or enclosures, which can be only determined by trial, give the nucleus of the structural idea; in other words, the way architects can best contribute to the scientific art of their day is by determining on the production of efficient plans in which the high intellectual ideal of honesty of purpose is paramount. Certain known laws and rulings are applicable in determining the arrangement of a three dimensioned structure especially when the latter is in a nebulous state. But these rules are purely arbitrary and form by themselves a species of mental scaffolding. It is significant of architecture, like painting and sculpture, that no book has yet been written which contains precepts for every possible contingency.

The fault of present-day building, and the chief of its failings as a scientific art, is the non-observance of principles which should be generic. We have a confused idea of styles, ornaments and details, but it cannot be said that our ideas are original, for we are fatigued by the effort to learn the past, and bewildered when we try to fit it to present-day needs.

The method of improvement is indicated along the structural path. Let us examine this even closer. You will concede that the skeleton of the plan determines the design. This is a primary truth and must be followed. The constructive faculty regarding materials next comes into play, its workings must be consistent with the main issues of the plan. The third quality, namely external form, is, or should be, of secondary consideration to the two previously mentioned but it must be none the less vital. The past styles are correct examples recording the psychology of the people who brought such works into existence. It is for us to profit by them, but it is also our bounden duty to consider the monolithic properties of reinforced concrete, or of steel and composite constructions. The exact reproductions of the antique must cease, there must be a building vernacular based upon reality and truth. Gradually as the movement gains force, fresh grace will

be acquired and a more direct style will result. As students we must be conversant with past styles, for they present in the aggregate, the rungs of the ladder by which we have ascended to our present vantage point, but it is no real help to the art of building to indulge in copying externals. There has been too much copying of form for form's sake, and too little regard for the distinction between form which represents a lost tradition, and form which exactly fits present requirements.

The collecting of data furnishes a precise knowledge of what has been done, so that we may have confidence for inventing anew. But the aim of such knowledge should be analytical, not empirical; it should, moreover, be directed to structural truths, for, whereas, some ancient architecture is structurally sound, other types like the Indian stupas represent symbolic form and little else. There are phases of Roman architecture, such as the vast amphitheatre and thermæ which obtain their effect, and draw their strength, from the complete unity of the structure with the appearance. But although this is true, in this specific case, it does not provide us with more than a general principle.

The architect from the outset of his career should begin to classify all buildings of history which exhibit harmony of structure with ultimate form. He will proceed to a general and catholic view of architecture, and will gain an independent outlook. He will look for the organic merits of a building, rather than be seduced by pictorial effects.

Construction and design therefore connote a return to first principles, the only sure means of securing modern expression in building. It can be argued that designs based entirely on logical reasoning are often ugly, on the other hand, it is equally true that the finest works owe a great deal of their coherent beauty to the observance of elemental truths. To-day few attempts are made to understand the qualities of imaginative construction.

Another mistaken policy is to limit architectural study to any particular style or period. At this stage we will again discuss the meaning of structure, this time the endowing of assembled materials with grace. We have, let it be supposed, arrived at the correct solution to a set of conditions in plan form, namely the structure determined in three dimensions; there remains:

- (a) The nature of the materials to be used.
- (b) The ability to exercise the function of these materials in terms of strength and expression.
- (c) The observance of harmony in the use of materials.

At this stage we come upon those nebulous qualities, scale, rhythm, sense of proportion, etc., etc., each of which are properties of articulation.



The design considered thus is still the embryonic state. This phase of thought on the part of a designer can be summarised as knowledge of materials and the possibilities arising from the right employment of materials.

Definition can be given to the parts of any structure and the correct employment of materials, especially if these materials were introduced exactly in conformity with the proper use.

The next stage, by far the most difficult, implies enlivening the structure with grace. No man, however talented, is able to produce a new style of architecture; there are some who in their desire for novelty are prepared to sacrifice technical requirements. Architecture is a scientific art, it is above decoration; it appears contented with fantasy and irritated when subjected to motives derived from tradition which are foreign to its present purpose. On the other hand the artist who serves the elemental truths of planning is thrice enriched. If designers aimed at uniformity in three dimensions with particular regard to harmony of materials and truthful expression, novelty and originality would come unsought.

Research has proved that all architecture worthy of the name, irrespective of style, period, or locality, bears the impress of human scale. Even those works of an awe-inspiring nature, all that are essentially monumental, have some part which is multiplied to form a repetition of articulation, and that part is always of a size to denote the proportions of a human being; this truth is found in pre-classical, classical and Byzantine buildings; such features, moreover, having a more than a decorative function, with the added value of offering the constant of comparison. Modern research has proved that old buildings possess a system of geometrical proportions, which developed vertically from the plan to insist the harmony of the whole. There is nothing to determine how these geometrical sympathies, or chords, were arrived at. We can assume, however, that once a design had reached a certain stage it was subjected to a system of testing and trial, either by triangulation or by some method of improvised chords or reciprocals. This procedure is best left abstract. Every designer has a system of his own. As a design represents a compound of graphics, if it is in unity, its parts must be harmonious and sympathetic, each and several will respond to some pronounced unit of the structure. We can assume, therefore, that in all fine buildings there is a repetition of a theme. Buildings, however, devised for different purposes, on dissimilar sites, will produce or contain their own geometric systems. In this will be seen an extension of a time-honoured process. The Greeks and the Romans worked to a system of modules, the mediævalists were governed by the theory of cells or compartments, the architects of the Renaissance took liberties with past models. But

in each case, to a variable extent, the nature of the construction opposed its forces and exerted limitations on the structural expression. In Byzantine art greater freedom was experienced. In buildings like Sancta Sophia and other domed structures, the theory of the unit was observed; but such was the advance in theory that construction became more completely harmonious with the prevalent conceptions of structure. If we adopt this system of reasoning the meaning of sequence in the tradition of building in its widest application becomes clear. It is obvious that a psychological impulse overshadows and controls the practice of building, either as a fine art or mere building. With the adoption of a revised system of construction, such as steel or ferro-concrete, a new field of operations is opened up. In this case all accepted ideals will be subjected to compromise, or, more wisely, the least important will be swept away. In its broadest issues a new style is dependent as much upon issues of economy, so far as material is concerned, as upon the revised development of the structural theory. The one holds the other in check.

Let us review the position. We began with the skeleton; we have considered the joints. The frame is erect, the flesh has been decided. Therefore it remains to consider the clothing and the jewellery.

It is permissible to give articulation to those facts of a structure which by no reason of their function and prominence are the most fitted to be expressed. You are not forbidden to avoid rounding awkward parts or to give accent to other parts that appear anæmic.

In the case of ferro-concrete buildings, the roundings and the shapings are legitimate. The facing of a building is akin to the stream-lining of the fuselage of an aeroplane, or the finish of a motor car. Ornament, mouldings, sculptural decoration and painted frescoes, if introduced with care have as much right to be, as the dominant points of support. Architects have only to consider them in due order, and if the selection is good the pleasure of the spectator is lasting. Ornament is something more than the enriching of the building, its relative value is to give poetic interest to rounded prose. The very elements of structure, particularly the details of construction, form, or should form, the basis of decorative articulation. At all stages of designing the architect must be critical. He has to say, Have I considered everything; is nothing omitted? Are the components of structure in true adjustment? Are the parts in sequence? Old works offer ideas but not solutions for present-day problems. There could be nothing worse than taking the ornaments of other ages and attaching them to a modern design. On the subject of ornament we are on debatable ground. Who is to say what the ornamentation is to be based on? Certainly we are tired of the Macaronic style of gilt plaster and endless variations of egg and

tongue. Is it not curious that no one has yet had the courage to break from the tyranny of past conventions in order to devise new conventions?

We must be more desirous of reconsidering stereotyped features. We are, however, more often than not uncritical in our selections, and muddle-headed in our application of past motifs. We do not attempt to give rein to our own powers, which, while finding expression in plans, are frequently stifled at a later stage by some preference for a stylish fashion.

In mentioning these matters I am aware that I am on dangerous ground; the theory cuts at the very spirit of the things we have all been cherishing and pro-

fessing. But the subject has to be faced. The movement towards reality, force, fitness, rightness of character, augurs a frame of mind which is akin to the spirit of art, ever changing and ever seeking change. Science, commerce and democracy are not all satisfying; there must be something spiritual, and that quality is supplied by art. Building is not decoration; it is something more than construction. It calls for originality. The layman has the opportunity to criticize but he has not the power to construct. The task of the architect is immeasurably more difficult than that of the painter or the sculptor, for he has to conceive, to construct and to give expression in the concrete.

## Reviews

TERRA-COTTA OF THE ITALIAN RENAISSANCE. (*Published by the National Terra-Cotta Society of New York.*) 1925.

This book illustrates, by means of two hundred photographic views, the use of terra-cotta in late Gothic and early Renaissance buildings in Italy. Its production results from a commission to Mr. A. F. Adams, A.I.A., to take photographs of representative examples of the use of this material—in North Italy particularly—on behalf of the National Terra-Cotta Society of New York, the body that has now published the results so obtained. We are thereby furnished with undeniable evidence of the beauty of terra-cotta—when rightly handled—in its application to buildings, and of its special appropriateness when used in conjunction with brickwork. The qualities of a material capable of being readily modelled, in its plastic state, to any form, and of being brought by subsequent firing to a condition of such permanence as to outlast many kinds of stone—as was well understood in the ancient world—make its relative neglect in modern times somewhat surprising. Even the one-time necessity for confining its use to small blocks no longer obtains to-day, for recent experiments with the material—in which American architects seem increasingly interested—show that the more highly developed technical facilities now available for the moulding and burning of clay compositions make it possible successfully to vitrify much larger blocks than used to be the case, and to produce them in clays of a great variety of colours. The present more general appreciation of both the utility and beauty of good brickwork provides a strong reason for attention being again turned to the production of terra-cotta ornament as the natural decorative adjunct of brick walling.

To afford an incentive to revived interest in this material no more effective means could be found than reference to old Italian towns such as Bologna, Cremona, Ferrara, and Pistoia, where beautiful examples of terra-cotta are to be seen. Among the buildings illustrated in this book that might be named for their outstanding qualities in respect of such work are the familiar Santa Maria della Grazie of Milan, the Corpus Domini at Bologna, the Tribunale Palace at Piacenza, and the Roverella Palace at Ferrara, which show the more delicate treatment of the material;

with examples of bolder and more free modelling in the Great and Small Cloisters of the Certosa of Pavia, and other fine work in great variety at Cremona, Bologna, Prato, and Siena. With vitrified clay of another class where colour glazes are used—identified with the great art of the Della Robbia family—we have such beautiful things as the Cathedral Entrance and Spedale del Ceppo at Pistoia—with its delightful frieze and roundels; and the plaques set on the front of Or San Michele at Florence. There are, almost necessarily, some notable omissions from the book, relating to this class, such as the ornaments of Brunelleschi's Pazzi Chapel (Santa Croce) and the Spedale degli Innocenti, at Florence, and Micheozzi frieze figures and dome ornaments to the Chapel of St. Peter Martyr of Sant' Eustorgio, Milan; together with work of the most elevated beauty, attributed to him and Lucca and Andrea della Robbia, in S. Maria dell'Impronta, outside Florence. Plate 67, Casa Caracci, Bologna, and the courtyard views of the Palazzo Bevilacqua at Bologna, give some idea of the delightful effects we know to be obtainable from the conjunction of fresco painting with terra-cotta ornament.

A feature of value that may be not inappropriate, claimed for this work is that it opportunely brings before us three decorative processes deserving increased attention to-day: the use of terra-cotta ornament in conjunction with brickwork; its use, similarly, in either plain or a painted plaster setting or surrounding; and the use of coloured glazed ware set in surfaces finished with brick or plaster, as illustrated by the works of the Della Robbia family. To those of us who think that the art of painting and sculpture have in recent times lost, to regrettable extent, their former intimate relation to architecture, the use of terra-cotta, either in its more cruciform or in the highly finished and more sculptural aspects associated with coloured glazed ware—or with either form in association with mural painting—has a distinct bearing on the possibility of sculptors and painters being more closely identified with building work than is the case at present. Building processes that encourage the association of sculptors, painters and architects—in the true craftsmanship sense—lie at the root of the beauty and excellence of past work, as perusal of the



lume does not fail to remind us. For its illustrations show clearly the resultant gain to architecture from the craftsman's pleasure in work; which we mentally contrast with our acres of mechanically produced stone façades and carvings and the almost equally lifeless character of so much modern brickwork and its ornamentation. Such a book, embodying views of quite unusual character and attractiveness, will certainly be a welcome addition to the library. F. R. HIORNS [F.].

ARCHITECTURE DES PAYS-BAS MERIDIONAUX AUX XVI<sup>e</sup>, XVII<sup>e</sup> et XVIII<sup>e</sup> SIECLES.  
By Paul Parent. (Paris and Brussels, 4to, 1926.)  
£1 6s.

The district treated of in this book covers what is now Belgium, Luxembourg, and fringes in South Holland and North France, but may for convenience be called Flanders.

The progress of the Renaissance in Flanders differs from that in other countries chiefly in the preponderating influence of the Church.

The people in the sixteenth century were exceedingly prosperous, and the flamboyant Gothic style with its intricacy and elaboration of detail harmonised well with what Professor Parent calls their "Passion de la parure de la richesse" and continued well into the seventeenth century.

The dawn of Italian influence was heralded by the importation of smaller objects of furniture and ornament, by the adoption of classical architectural backgrounds by the painters and by the publication at Antwerp in 1539 of Serlio's fourth book of architecture.

The Renaissance started under the best auspices in Flanders—a rich people, an abundant and varied supply of brick, stone and marble, and, above all, a splendid body of masons, sculptors and craftsmen.

The Duchesse Anne d'Autriche, widow of Philippe le Beau, when she built the splendid Church of St. Benoit at Brou in 1505-1532, took with her to France Van Orghem, master mason, and Van Room, sculptor, both of Brussels, with unsurpassed results.

When, however, she built her palace at Malines in 1517 she employed a French architect, Guyot de Beaugrand, and again her taste was justified, but this is almost the only building in Flanders showing French influence.

Lay architecture does not seem to have been very attractive to Professor Parent. He gives a number of exterior views, but no interiors, of houses or town halls, and all his examples are taken from towns.

The town houses, originally of timber, followed in Masonry the tradition of timber construction long after this was forbidden (in the latter part of the sixteenth century). The universal use of brick led to much lighter and more daring construction than in the case of countries where stone was the standard material, and this is particularly noticeable in the churches.

With Church architecture Professor Parent deals exhaustively, especially with the work of the Jesuits, whose influence on the later Renaissance was very great.

Coming into the "reconciled" country after the wars of religion, they built at first in the traditional style,

but their dependence on Rome—the plans and priced quantities of all projected buildings had to be submitted to headquarters for approval—and the influence of humanism drew them rapidly and inevitably towards Italian models, the rector of Douai had the plan of Gesù sent from Rome to work upon. The rapidity of this change is shown by the contrast between the churches of Tournai, 1609-1614, and St. Michel Louvain, 1660-1671, the former is Gothic, the latter Baroque.

Following the counter-reformation, a great religious revival swept over the country and led to the rebuilding of numbers of old churches in the new style, so that now the Church architecture of Flanders is predominantly Renaissance.

The eighteenth century made little change in general form, but in detail may be noted, in the Jesuit Chapel at Cambrai, composite columns 15 diameters in height carrying domical stone vaulting!

The book is amply documented and richly illustrated with over 100 photographs, 58 other plates and innumerable thumb-nail sketches, and is a monument of industry and research. CHARLES E. SAYER [A.].

ARCHITECTURAL CONSTRUCTION. Vol I. An Analysis of the Design and Construction of American Buildings. By Walter C. Voss and Ralph Coolidge Henry. (Chapman & Hall, London, 1925.) £5.

In this voluminous and sumptuously illustrated book the principal works connected with the construction of buildings in the United States of America are examined in a most thorough and comprehensive manner. The order adopted is the reverse of that usually pursued in this country. Our text books on building construction generally begin with a description of the materials employed in building, their properties and uses, and then pursue an examination of the various methods of construction applicable to the material used and the result desired. In this volume the first and largest portion is devoted to the examination of seven types of building: cottages, city houses, suburban houses, country houses, schools, churches and office buildings. Each of these types is represented by an example chosen, and apparently well chosen, from a recent building, and to this example a distinct part of the work is given.

The part contains a short introduction or foreword descriptive of the character and situation of the building, many full-page photographs of it, taken externally and internally, a set of working drawings, comprising plans, sections, elevations, and large scale details, and a fairly full description of the works of all trades concerned in its erection, accompanied by scale drawings and sketches in isometric projection. A further chapter is devoted to landscape work and describes the layout of parks, lawns and gardens, and the construction of drives. The remaining portion of the volume deals with a more general description of the work of the various trades not occurring in the foregoing examples, and a description of the various building materials.

This order of arrangement doubtless has its advantages, but its adoption has seriously impaired the value of the book as a work of reference and as a text book. For these purposes it is most desirable that the various kinds of con-

struction—such as of stairways—should have some order of grouping, and not be scattered throughout the volume, the general treatment under the various trades in the latter part of the volume being of too cursory a character to supply this defect. Useful appendices include articles on the construction of chimneys, nursery stock, the writing of specifications, and forms of agreement between the owner and the architect and the owner and the contractor.

In the part dealing with the country house the example chosen is a large house of stone, brick and timber in the Tudor style, designed by Mr. John Russel Pope and set amid charming sylvan surroundings. The architect appears to have reflected the spirit of his subject successfully without descending to servile imitation. From the commencement of his work Mr. Pope desired a greater degree of freedom to alter his design during the progress of the work than the usual documents allow. He wished to make experiments with the various combinations of materials and colours and to observe the effects of light and shade. These experiments were carried out on the site with materials finally used. Full-sized models of the various parts of the house were made and assembled on the site, and these were modified and changed until the desired texture or detail was obtained. Although a sufficiently detailed specification and set of drawings were used to define the materials to be employed and to secure competitive tenders, latitude was left for the results of the experiments referred to above, both in regard to time and cost. Otherwise the specifications differed in no essential particular from those usually drawn up. "It should not be inferred that the owner was entirely indifferent to lavish expenditure; on the contrary many of the finished effects were secured with economy through the use of inexpensive materials. The brick, for example, was of the roughest sort, the type usually discarded as overburned or misshapen." Nevertheless our cousins are happy in their clients.

The articles on concrete work, structural steel, and timber are well written and profusely illustrated, laborious mathematical formulæ being wisely omitted here. In the buildings described, of which the structural members are of steel, including the central tower of the church, plans of the framework, with the sizes figured on, are given. The scale drawings and details of all the buildings are lucid and reasonably complete and all the photographic illustrations are clear and of large size. The authors are to be congratulated on this sumptuous addition to the works on building construction in America. SIDNEY TOY [F.].

NICOLAS HAWKSMOOR. *By H. S. Goodhart-Rendel. (London: Ernest Benn, Ltd., 1924.)*

It is not inappropriate that Hawksmoor's three great churches should have presided over the eastern quarter of the metropolis. Limehouse, Spitalfields and Wapping-Stepney, as it was called previous to the creation of the parish of St. George in the East, once enjoyed an environment very different to that of to-day.

A royal palace had been built at Greenwich, and London's extension followed in the same direction. Here was the great waterway and the port of London, giving to the neighbourhood a character well suited to the habit of mind of the City merchant. For it is here that the City merchant lived before the days of Kennington

and Clapham Rise. Thus one feels that these churches of Hawksmoor, so expressive of power and so unbending towards the trivial in ornament and detail, befit their parishes in an eminent degree.

An Independent Church had been established on Stepney Green by the Rev. Wm. Greenhill, who had been domestic chaplain to Charles I, but who, in consequence of his Evangelical leanings, abandoned his chances of preferment in answer to a more serious call. The church prospered despite persecution—its pastors slipped over to Holland when matters were serious—until in the eighteenth century we find the Rev. Samuel Brewer, B.D., preaching 50 consecutive May-day sermons to large congregations. Incidentally, I may add that Dr. Brewer's granddaughter married William Brook, the architect of the London Institution in Finsbury Circus, the only feature therein that has escaped destruction. It was possibly to stem this tide of nonconformity that St. Anne's, St. George's and Christ Church were built. The Independent Church was a structure of some importance. "The roof was supported by four noble pillars presented by the States of Holland." Still, it could hardly have competed with either St. Anne's or Christ Church, which are not only among the finest of the City churches, but their styles dominate the landscape viewed from the northern and southern heights. These steeples, with the west fronts from which they rise, screening as they do the building behind, may indeed be regarded as separate monuments. For it is here that Hawksmoor seems to have concentrated his singular gift for design. They rise sheer and uncompromising with a dignity that is his own. Mr. Goodhart-Rendel compares him with his contemporaries to the disadvantage of the latter. There is no need to do this. Gibbs kept to his own side of Temple Bar, where we could ignore him, while Wren was entitled to consider himself master of the situation, wherever that might happen to be. Hawksmoor served Wren in one capacity and another for many years, a faithful performance that we are glad to remember to the exclusion of any sense of rivalry. If he did not receive his full mead of recognition, it may have been that his genius was not altogether of a kind to win popularity, nor was he the man to court it. It may be doubted whether the influence of Vanbrugh, whose clerk of the works he was at Blenheim, was suited to his more sober accomplishments, for it must be confessed that some of his features come as a surprise. The vogue for Gothic detail had not died out, and while Wren dealt with it almost playfully, Hawksmoor attacked it with a grim earnestness that endangered the reputation of some of his monumental efforts. He toyed with the picturesque where Vanbrugh drank deeply. There is a design for a monument to some unknown worthy which is surmounted by a group symbolising Justice, Truth and other virtues temporally supporting the hero upon a platform, from beneath which one of them is removing a column prior to his apotheosis. The sentiment is admirable, the monument impossible. A sense of humour might have saved him from more than one adventure.

Mr. Goodhart-Rendel may be congratulated on having written a eulogy upon an architect of outstanding ability.



and great originality, and while we should have welcomed fuller criticism from one competent to give it, we realise that he was placed at a disadvantage in a volume so slender.

The photographic plates which illustrate the text represent Hawksmoor's six churches, the Queen's College screen, the work at Greenwich Hospital, and the Mausoleum at Castle-Howard.

It is a pity that the illustrations do not include plans. They express the whole conception, which a multiplicity of perspective views tends to dissipate. Also, when the plan itself is under discussion, as it is in the author's description of the Greenwich Church, an illustration assists him to emphasise the point which he wishes to make.

C. J. TAIT [F.].

ROMAN ARCHITECTURE and its Principles of Construction under the Empire, with an Appendix on the Evolution of the Dome to the Seventeenth Century. By G. T. Rivoira. Translated from the Italian by G. McN. Rushforth. (Oxford: At the Clarendon Press, 1925. 11 in. by 9 in.). £5 5s. net.

The original of this book appeared under the title *Architettura Romana* in 1921, and the present work is a translation completed since the author's death, and, therefore, as Mr. Rushforth states in his editorial notice, deprived of the author's revision. There is no trace of any need of revision: the production shows the same care as Mr. Rushforth's version of Rivoira's *Le Origini dell' Architettura Lombarda*. There is a marked similarity between the two books. The old argumentative spirit of the earlier work is apparent in the later one. In both, Rivoira was perhaps more at home than in his *Architettura Mussulmana* (1914), though his *flair* was undoubtedly the investigation of the sources of domical architecture in the West.

Without going quite so far as to state that the book is indispensable to the student, it is certainly one that no good architectural library can afford to do without, and that schools of architecture should endeavour to possess. Roman construction is its predominant theme and there is nothing in Roman work that is of greater value than its construction. Like full Gothic, Roman vault and dome structures, expressed their purpose through construction. Rivoira was not content to analyse: he probed with amazing knowledge and ability. To his exact and conscientious mind, nothing satisfied but the ultimate truth as he could discern it. There is probably nothing in English so thorough as this account of Roman structure.

The book begins at the end of the Republic and ends with San Vitale at Ravenna. A short appendix deals with the construction of well-known domes and kindred structures down to St. Paul's. The illustrations are extremely satisfying and very well chosen. In addition to many plans there are reductions of drawings by Sangallo, Palladio, Piranesi, etc., one of the most important being Sangallo's restoration of the eastern hemicycle of Trajan's Forum. A point of great value in these drawings is their proof of continuity from Rome to Renaissance. They lift the veil quite sufficiently to show that if the full tale were told, Roman work contained endless experiments in methods we are accustomed to regard as almost entirely Renaissance

—niche treatments, pedimented features, pilaster treatments, not only in themselves but as rhythmical composition; pillared and arcaded vestibules and halls on many an ingenious plan. The story of the Roman achievement is a great one, and Rivoira will concede nothing of the structure in it to the Greek. He is the great protagonist of Rome as against Hellas and the East for the formative influence on later work in the West. In certain known cases of importance, the Greek was called in, as was Apollodorus of Damascus for Trajan's Forum, and we see Hellenic delicacy in houses at Pompeii. But Rivoira is right: these are not the greater Rome which we see in the structures of the Pantheon, the Basilica of Maxentius and the Nymphaeum on the Licinian Hill.

The Pantheon is treated with thoroughness. From the illustrations alone—including some particularly valuable diagrams from Beltrami's "Pantheon," one can read all the main facts of its construction. Like the roof of Westminster Hall, it was one of the greatest of all structural achievements before the steel age. Nothing was left to chance. The great encircling arches of the lower tier were of the soundest type, in three rings for their segmental tops and in one great ring for their haunches. At right angles to these were the invaluable smaller arches which spanned the hollows in the immense walls, ingeniously placed on great bonding pad-stones. The whole construction has proved that its firmly-knit elements were of the most enduring kind.

Most of the plans given are not of well-known buildings now standing, but from drawings in the Uffizi and other collections. There are over twenty of such plans, the greater number being varieties of circular or polygonal forms. Here, again, we get evidence not only of the surprising ingenuity of the Roman mind, but of the probing into Roman sources of design by the architects of the Renaissance. There are two photographs of Michelangelo's model of the dome of St. Peter's, including a sectional one illustrating the construction. The great abutments of the tepidarium of the Thermae of Diocletian are explained with care, and Rivoira's opinion that these may have suggested to Anthemius (whose brother is stated to have worked in Rome) the great buttresses of Sta. Sophia, seems plausible. One cannot quite so fully agree that the Basilica of Maxentius—and not the earlier Roman basilicas—inspired Constantine's great Christian basilicas at Rome. Another statement (perhaps a translator's error) which is not clear is that the arcades of the outer arches at Old St. Peter's spring directly from the capitals without the intervention of an abacus. The illustration given (from a mosaic) though indistinct, does not seem to support this: perhaps "entablature" was meant.

The Etruscan contribution is very adequately treated, and no chapter in the history of art deserves greater attention. Rivoira's treatment of it is illuminating on many points. The masterly handling of stonework is well disclosed, whether in the construction of "beehive" or rectangular domical chambers in stone or in the use of the great arch and its almost necessary accompaniment—the tunnel vault. One is set thinking about many things. Where, for example, did this arch come from in the fourth century B.C.? Rivoira seems to suggest Assyria. Yet, though this part of the tale is just as obscure, there is no evidence of

its consistent use at Pergamos and Antioch on the Orontes, a century later. The conical-roofed tomb in the eighth and seventh centuries B.C. can be understood. Crete, and afterwards the mainland of Greece, were doing similar constructions from five to three hundred years earlier. There is also ample evidence of a Hellenisation in the crafts during the fourth, third and second centuries B.C., in Etruria, an Ionian influence which is different from the earlier Doric of Paestum; but perhaps from Mesopotamia by way of Syria came the stone arch and tunnel vault which we find in Italy side by side with the tumulus tomb and the Etruscan form of Hellenised temple. All these three elements were incorporated by Rome: the tumulus became the tomb of Cecilia Metella, the temple we see in Fortuna Virilis and many other examples, while neither Augustus nor his successors could build finer monumental arches than those of Volterra and Perugia.

In Mr. Rushforth, Rivoira had an ideal translator. He is a scholar, in love with everything Roman, who knew Rivoira's mind thoroughly. English students are fortunate in possessing his translations of the three books mentioned above. The present work is delightfully arranged. The chapters are in chronological sequence, with the great periods of the Empire, under Emperors' names, as headlines. There is a valuable bibliography as well as an index.

THEODORE FYFE [F.].

## The Library

HIGHWAYS AND BYWAYS IN WILTSHIRE. By Edward Hutton. 8vo. Lond. 1919. 7s. 6d. [Macmillan and Co.]

HIGHWAYS AND BYWAYS IN NOTTINGHAMSHIRE. By J. B. Firth. 8vo. Lond. 1916. 9s. 6d. [Macmillan and Co.]

The Highways and Byways series of books needs no introduction, but the two volumes named are of particular interest to architects owing to the fact that the Nottinghamshire book is illustrated by Mr. F. L. Griggs—and the Wiltshire by Miss Erichsen. Both books were published some eight or nine years ago. From its wealth of architectural subjects Wiltshire is a fascinating country in which to travel, and this book is valuable as indicating where the finest examples are to be found. Lacock should be visited by all.

Nottinghamshire is more placid and less pronounced in its local style and material, but the drawings give distinction to the volume.

W. H. A.

ROMANCE CHURCHES OF FRANCE. Oliver E. Bodington. [Grant Richards]. 1925.

A quite useful introduction to churches of the twelfth century in the different districts now comprised in France, illustrated by numerous photographs.

H. C. H.

At the King's Levée, held on 2 March, at St. James's Palace, Mr. E. Guy Dawber was presented by Sir Francis Dicksee, P.R.A.

### THE REGULATION OF ARCHITECTURAL COMPETITIONS

In the report of the Eighth General Meeting the name of Mr. G. Leonard Elkington [A.] was wrongly given as Mr. George Elkington [F.].

## Limewash as a Stone Preservative.

ISSUED BY THE COMMITTEE OF THE SOCIETY FOR THE PROTECTION OF ANCIENT BUILDINGS.

The following notes are written as a description of limewash which has been found generally successful as stone preservative. The lime used for making limewash must be stone lime, and not either chalk or gas lime. It must be freshly burnt and in the lump. The particular lime described here, namely Wakeley lime, was chosen on this account, and because it is a light stone colour, and so saves in many cases the need for any colouring ingredients which may reduce the penetrative and preserving qualities of the wash. It is recommended that any question of colour or toning down should be left until after the final coat of limewash when it can easily be done (if it must be) by rubbing or brushing on a little dry colour or dust.

Wakeley lime is obtained from Messrs. G. F. Rippon and Co., lime merchants, Queen Street, Peterborough, who will send any small quantity by rail—and it is well to mention, when ordering, that fresh lumps are required, being more fiery for limewash. To mix the smallest quantity, take, for instance, an ordinary iron three gallon domestic pail. Put a lump or two of the dry lime weighing 2 lb. (rather less than more) into the pail with a quarter of a pound of crushed common salt, and a quarter fill the bucket with boiling water (three quarts). So soon as the water has broken down the lumps, it will boil furiously for about a minute. Add a little more water and give it a good stir—leave it a few minutes to finish slaking—and then fill the bucket with boiling water, making twelve quarts in all. It will be seen that this pailful of limewash ready for use is about as thin as skimmed milk. The use of boiling water for slaking an already fiery lime is to set up an extra heat which produces a more completely dissolved and penetrative wash. If the lime does not boil in the pail throw it away and try another 2 lb. lump.

After first brushing down the stonework, apply the limewash with the ordinary grass brush, lightly and patiently rubbing it into the stone. Some stones will absorb a great quantity. It is very important, especially with the first coat, to keep on saturating the stonework with the limewash, carefully working it over and over again into all the interstices. When the first coat is dry, apply a second coat—and then a third. The importance of care in the application cannot be too strongly insisted on; to do it really well requires time, patience, skill and hard work. The stonework should be normally dry—because it is then absorbent; but in very hot weather and in a hot sun it will be found that there is too much evaporation outwards to enable good work to be done.

A word on the preparation of ancient crumbling stonework for limewashing may be useful. All attempts to fix and solidify loose scaling and sandy deposit in position, as some chemical methods try to do by spraying, seem in the end only to increase the disease; and similarly there does not appear to be much use in spraying limewash on to crumbling stone. But provided the limewash is applied with a brush and sufficiently thin, as



bove described, it is better to do without any preparation than to risk removing by too much brushing anything that might be saved. The problem is to find out by experiment in each case how far it is really necessary to go in the way of brushing down, because some crumbling surfaces, which work up a kind of lather as the first coat is applied, are quite hard by the time they are dry and ready for the second coat. A good method, after brushing off the surface dust and deposit, is to rub the tonework down gently with the hand or a piece of rag; this generally brings away all that need be removed, and, so far as words are concerned, may, perhaps, be safely laid down as a limit of preparation.

When all the words have been said about any particular limewash, it must be remembered that it takes some time to become a really good limewasher, and many men cannot be got sufficiently interested to take so simple a thing seriously. But carefully done, limewash is more than a protective coating on the stone—it is absorbed into and hardens the stone, and cannot be removed. Too much must not be expected from the first application to badly crumbling surfaces, for the scaling may to some extent continue. A second coating after an interval of some years, and even a third, will carry the healing process further every time.

The effect of the treatment on doing it for the first time, and a large quantity at once, may be thought startling; but experience shows that "toning down" very quickly takes place, and the old textures and irregularities quickly strike through.

#### THE ST. ALDATE'S SITE AT OXFORD.

With regard to the suggested development of the St. Aldate's site at Oxford, the following letter from Mr. Alfred Gotch, Past President, appeared in *The Times* on 1 March:

SIR,—When the Royal Institute of British Architects held their conference at Oxford in 1924, one of the matters outside the domain of architecture that gratified them to the highest degree was the impression they received of the sympathetic spirit shown by the City Council in regard to preserving the beauty of their city.

It would now appear, from your news published on 1 March, that, owing to some misunderstanding between the council and the governing body of Christ Church, there is a danger that the admirable project for improving St. Aldate's may fall through. I am given to understand that, could this misunderstanding be removed, and each authority really know the mind of the other, the difficulties would disappear.

May I, as president of the Institute at the time of the conference, and speaking (if I may so far presume) on behalf of architects and all other lovers of Oxford, beg the authorities concerned not to allow what is apparently a misunderstanding to stand in the way of an improvement which they are both desirous of effecting? This is especially as the alternative use of the site in question could appear to be more suitable to an industrial centre than to so noble a town as Oxford.—I am, yours faithfully,  
J. ALFRED GOTCH.

At a meeting of the Oxford City Council on 1 March, it was stated that the Property and Estates Committee had passed a resolution that the development

of the St. Aldate's site should be proceeded with in accordance with the proposals adopted in by the Council in June—namely, to develop the site on commercial lines, which would include the erection of workmen's dwellings on part of the site. During the discussion at the City Council, Alderman Sir Hugh Hall deprecated the loss of the opportunity of making St. Aldate's one of the finest approaches to Oxford, and moved an amendment that the matter should be referred back for further consideration.

The amendment was carried by 26 votes to 16.

#### THE WREN SOCIETY.

53 Doughty Street,  
London, W.C.1,  
15 March 1926.

*The Editor, JOURNAL R.I.B.A.,—*

DEAR SIR,—Mr. Gotch, in his admirable review of the Wren Society's recently published Second Volume, appealed to Students of the historical side of Architecture to lend their support to this Society by enrolling as members, and my object in writing is to make known to those of your readers who are not members the work that is being undertaken by the Society.

The Wren Society was founded in the bi-centenary year of Wren's death with the avowed object of seeking out and publishing original drawings and documents of proved authenticity relating to the architect's life and work.

The Society has already published two volumes containing collections of original drawings for St. Paul's Cathedral of which by far the greater number have never before been reproduced and a third volume is in course of preparation. These publications have been received with marked favour both by architects and the Press and my Committee are anxious to extend still further the work they have undertaken and to make succeeding volumes even more useful and attractive to Wren students.

This can be done, but only by the help of an increased membership and it is for this reason that my Committee appeal for new subscribers.

The publications of the Society are issued free to members on payment of the annual subscription of one guinea and are not obtainable through the ordinary trade channels.

Enquiries and applications for membership should be addressed to me at 53 Doughty Street, W.C.1.—Yours faithfully,  
H. DUNCAN HENDRY, *Hon. Secretary.*

#### WATERLOO BRIDGE.

It is understood that the Prime Minister has under consideration a suggestion, made to him by the Fine Arts Commission, which was called into consultation by the L.C.C., that the future of Waterloo Bridge is a matter of national and not merely metropolitan interest, and that any action in the matter should be by way of a Parliamentary Bill. Mr. Baldwin has also been in informal communication with some of the leading members of the London County Council on the subject. There is one point on which he will be able to reassure the Fine Arts Commission, and that is that no action can be taken to erect a new bridge until Parliament has had an opportunity of considering the matter. The

Council cannot undertake any new large capital expenditure until it has submitted the proposal to Parliament in a Money Bill. It is understood that the London County Council Money Bill to be presented this year will include the provision of money for Waterloo Bridge, so that the matter can then be discussed. It was suggested a few years ago that Waterloo Bridge should be scheduled by the Office of Works as an ancient monument which could not be demolished without its approval, but the suggestion was not adopted.

#### OLD BRIDGES OF FRANCE. EXHIBITION OF DRAWINGS AT THE R.I.B.A.

Through the kindness of Professor Emerson (Hon. Corresponding Member) and Monsieur Gromort, authors of the recently published book on the Old Bridges of France, an exhibition will be held in the Institute Galleries, from 22 April to 15 May, of the originals of the illustrations of this book. Professor Emerson is lending the water-colours by the late Pierre Vignal, and a selection from the pencil sketches of Messrs. Rosenberg and Chamberlain, and of the measured drawings, and Madame Vignal is lending a selection from her husband's water-colours of other subjects. The exhibition promises to be of the highest interest, both from the nature of the subject, which has never been so fully treated before, and from the excellence of the drawings. The book has been presented to the Library of the Institute by the authors. It is hoped that the exhibition will be largely visited by members and students.

## Legal

### ARCHITECTURAL COPYRIGHT.

KENNETH DALGLIESH *v.* SANDOWN (ISLE OF WIGHT) URBAN DISTRICT COUNCIL, TOM JOSEY (THEIR SURVEYOR) AND H. W. BROWN (BUILDER).

This was an action by Kenneth Dalgliesh [A.], in which he claimed an injunction restraining the defendant Council, their officers, servants and agents from making, using, or otherwise dealing with any copy of the plaintiff's architectural plans or otherwise infringing the plaintiff's copyright therein or the building erected therefrom, delivery up of all infringing copies, damages for the infringement, and costs.

In March 1923 the plaintiff designed a bungalow to be erected at Sandown, Isle of Wight, and submitted the drawings in duplicate to Tom Josey, the surveyor to the Urban District Council, who returned one copy to the plaintiff with the Council's approval endorsed thereon. The bungalow was erected under the plaintiff's supervision and completed in November 1923.

In May 1925 the client called the plaintiff's attention to a similar building nearing completion and being erected by the defendants at the entrance to the Sandown Recreation Ground. The plaintiff inspected this building, which he found to be an exact copy of the one erected from his design both as to dimensions and design with the exception of a few minor details.

The plaintiff wrote to the defendants calling attention to these facts and demanding an explanation, but without

result until the matter was placed in his solicitor's hands. The defendants' solicitor eventually wrote denying liability, expressing regret and enclosing a cheque for 12 guineas, which was returned and a writ issued.

The motion for an injunction came before the Court. December last, when at the adjourned hearing all defendants gave an undertaking in the terms of the motion. At the same time it was intimated by the defendants' solicitor that the defendants would be prepared to admit infringement and pay £50 damages and costs. This offer was accepted, and under an order made before a Master in Chancery the infringement of copyright was admitted by the defendants, the copies of the plans were delivered up, the damages paid, also the costs as between solicitor and client, together with any costs properly incurred by the plaintiff preliminary to the issue of the writ and all further proceedings in the action stayed.

The Council of the R.I.B.A., on the advice of the Practice Standing Committee who had investigated the matter, were prepared to assist Mr. Dalgliesh financially and otherwise in pursuing his claim. Messrs. Gane and Son, Mr. Dalgliesh's solicitors, have supplied me with copies of the legal documents and final order for the report as being of interest to the profession and, I believe, the first case brought claiming architectural copyright under the Act of 1911.

J. DOUGLAS SCOTT,  
*Chairman, Practice Standing Committee.*

3 March 1926.

### LOCAL AUTHORITIES AND QUALIFIED ARCHITECTS.

Members will be interested to read the following question and answer in the House of Commons:

Sir Philip Pilditch asked the question at the request of the Royal Institute, as the Council feel that the subject is one of great importance at the present time.

*Monday, 15 March 1926.*—SIR PHILIP PILDITCH: To ask the Minister of Health, whether he is aware that certain localities local authorities have appointed sanitary inspector or inspector of nuisances to act as architect for their housing scheme, irrespective of whether the official is qualified as an architect; and whether, seeing that it is undesirable that housing work should be entrusted to other than qualified architects, he will notify local authorities that they should appoint only qualified architects to carry out housing schemes.

MR. NEVILLE CHAMBERLAIN: As a general rule, local authorities are not now required to submit for their approval plans and details of their housing schemes. But as stated in the circular which was issued to local authorities in connection with the Housing Act of 1924, I attach importance to the maintenance of a good standard in the planning and lay-out of schemes, and I hope that they can rely on the co-operation of local authorities in doing all within their power to ensure that these features will be creditable to the country and to the local authorities. I take this opportunity of recalling that local authorities were informed in connection with schemes under the Housing Act of 1919 that competent architects should be employed to plan and design the houses to be erected.



## SCIENCE STANDING COMMITTEE.

### " BUILDING SCIENCE ABSTRACTS "

By the courtesy of Dr. Stradling, Director of Building Research, information in the possession of the Department of Scientific and Industrial Research upon building materials and practice is placed at the disposal of members of the R.I.B.A.

A comprehensive synopsis of the numerous activities of the Department has been placed in the Reference Library, together with copies of *Building Science Abstracts*, issued monthly.

The latter consist of a very large number of short descriptive notes of new information upon matters relating to or connected with building and decoration which have been collated by the Department from the technical press of the world. The necessary information to enable any particular piece of new information to be studied at length at its source is added to each note.

Some of the information thus rendered available is of course only of very remote interest to architects in practice, and part records the progress of incomplete research work. Two members of the Science Standing Committee therefore go through the Abstracts upon their receipt and mark any items which appear to be of general and immediate interest.

## R.I.B.A. MAINTENANCE SCHOLARSHIPS IN ARCHITECTURE.

The Board of Architectural Education of the Royal Institute of British Architects offer for award in June 1926, six Maintenance Scholarships for from one to three years each of a maximum value of £100 tenable from 1 October 1926.

The Scholarships are intended to enable promising students of either sex, whose parents or guardians have not the necessary means, to attend an approved course at one of the Schools of Architecture recognised for exemption from the R.I.B.A. Examinations. Students who are already taking such a course would not be eligible to apply for a Scholarship.

The values of the Scholarships up to the limit of £100 per annum will depend upon the financial circumstances of the parents or guardians of the candidates. Parents or guardians will be required to furnish full particulars, on the proper form, of their financial position.

Full particulars of the Scholarships, including the method of application and selection of candidates, etc., may be obtained on application to the Secretary, Board of Architectural Education, Royal Institute of British Architects, 9 Conduit Street, W.1., not later than 1 May 1926.

## THE BUILDING EXHIBITION, 1926.

The promoters of this year's Building Exhibition are offering £100 for the best essay giving personal impressions of the Exhibition, the title of the essay to be "My Impressions of the Building Exhibition, 1926." In addition to the above-mentioned prize, four valuable books dealing with architecture will be given as architectural prizes. Mr. E. Guy Dawber, F.R.I.B.A., Mr. H. S. Godhart-Rendel, President A.A., and Mr. J. C. Squire, President of the Architecture Club and Editor of the

*London Mercury*, will act as judges, and their decision must be accepted as final.

The competition is limited to architectural and building students in the United Kingdom who are connected with a trade school, polytechnic or university.

Intending applicants should apply for a form to Mr. H. G. Montgomery [*Honorary Associate*], 43 Essex Street, Strand, W.C.2.

## Allied Societies

### YORK AND EAST YORKSHIRE ARCHITECTURAL SOCIETY.

The annual dinner of the York and East Yorkshire Architectural Society was held at York on 26 February, Major J. Malcolm Dossor, of Hull, President of the Society, presided, and amongst those present were Mr. E. Guy Dawber, P.R.I.B.A., Mr. H. L. Paterson (President of the Sheffield and South Yorkshire Architectural Society), Mr. T. Butler Wilson (Leeds and West Yorkshire Architectural Society), Mr. S. Wilkinson (consulting architect to the L.N.E.R. Co.), Mr. J. J. Brownward (headmaster Hull School of Art), Mr. W. E. Parkinson (headmaster, York School of Art), Mr. R. Jackson (hon. secretary) and Mr. E. A. Pollard (hon. treasurer, York and East Riding Society), Mr. H. Andrews (Hull), Mr. W. H. Brierley, Mr. A. Cowman, Mr. F. J. Forty, Mr. D. Harbron (Hull), Mr. F. J. Horth (Hull), Mr. L. Kitchen (Hull), Mr. S. Needham, Mr. J. E. Reid, Mr. J. S. Syme, Mr. S. G. Highmore, Mr. J. Vause and Mr. J. P. Wilde.

Mr. S. Wilkinson, in proposing the R.I.B.A., referred to the successful results obtained by the amalgamation of the various allied societies and the Royal Institute.

Mr. Guy Dawber, in reply, said the Royal Institute was a very large and imperial organisation, and it valued highly the assistance and counsel of the allied societies. They were, he said, going through extraordinary changes, and the whole world was poorer for it, as it was getting more democratic and less secure. The practice of the architect was changing and they were all feeling its effect. The large country house was now more or less a thing of the past. In the old days it was simply all aristocracy and financial power, but to-day the aristocracy had but little power, and probably less money, and the financiers were shy of putting their money into domestic bricks and mortar. He did not think there was a living architect who would be called upon to build a Harewood House, a Castle Howard, or a Blenheim. Those days were passed, and they could attribute the cause, as much as anything, to the advent of the motor car, which had changed the social life not only in this country but all over the world. As a result of the change the great examples of modern architecture were confined to the public and commercial buildings in the towns and cities. In London, at any rate, there was the need for some artistic authority to prevent the disfigurement of fine sites by absolutely inappropriate buildings.

Mr. H. L. Paterson\* gave the toast of "The York and East Yorkshire Architectural Society," and referred to the

\* It is with great regret that we report the death of Mr. Paterson, which has occurred since this occasion. (See p. 321.)

architectural beauties of York and the East Riding, both of which could, he said, show to them some of the best architecture, not only in the North of England, but in the country.

The President responded, and said he was delighted to hear that Mr. Dawber had entered upon or was about to enter upon a vigorous campaign to arrest the spoliation of their countryside. There was scarcely a suburb in a rural district, he said, which was not being robbed of its natural beauties by the erection of buildings of most unsuitable materials and design, and without any consideration of lay-out. That was, of course, largely due to the terrible shortage of dwellings and the scarcity of materials and skilled labour, but much could be done by the education of public opinion, by the employment of trained and competent architects, and by the wise use of the extensive powers granted to local authorities and property owners by the recent Town Planning Acts in seeing that the countryside was developed in accordance with its natural beauties. He was grieved to see the speculative builder making his entry into some districts with his ugly brick buildings with flat, blue slate roofs, but he thought that if the Town Planning Acts were wisely put into force a very great change could be effected in the present rapid developments in building operations throughout the country.

#### NORTHERN ARCHITECTURAL ASSOCIATION.

##### TEES-SIDE BRANCH.

The third annual meeting of the Tees-side Branch of the Northern A.A. was held at Stockton-on-Tees on 25 February. Mr. Joshua Clayton, of Darlington, was elected chairman, in the place of the retiring chairman, Mr. T. W. T. Richardson. The remaining officials for the coming session were elected as follows:—

*Vice-Chairman.*—Mr. R. R. Kitching, Middlesbrough.

*Hon. Secretary and Treasurer.*—Mr. A. Harrison, 69, High Street, Stockton.

*Assistant Hon. Secretary.*—Mr. A. W. Groves.

*Hon. Auditor.*—Mr. C. Cayley.

*Committee.*—Messrs. T. W. T. Richardson and J. Sanderson Messrs. C. F. Burton and G. J. Bell; Messrs. C. Cayley and H. B. Richardson; Messrs. J. A. E. Lofthouse and J. R. Wray

*Associates' Representative.*—Mr. E. C. Bell.

*Students' Representative.*—Mr. C. E. Westmoreland.

In the annual report for the past session the three outstanding events for 1925 were given as (1) the amalgamation of the R.I.B.A. and the Society of Architects, (2) the celebration of the centenary of the Stockton and Darlington Railway, held in July, (3) the visit of the members of the R.I.B.A. to Newcastle-on-Tyne and Durham.

The membership has increased to 66, as compared with 51 in the last report.

The Summer Meeting was held at Durham on 10 July 1925 in connection with the R.I.B.A. visit, a good membership of the Tees-side Branch being present on the first occasion when the Branch were able to meet representatives of the R.I.B.A. personally. The arrangements made by Mr. Ian MacAlister (Secretary R.I.B.A.) and Mr. Norman McKellar, the Conference Honorary Secretary, were greatly appreciated.

The Autumn Meeting was held at West Hartlepool on 29 October 1925.

The first part of the programme was a visit to view the restoration of St. Hilda's Church, Hartlepool, where the party were courteously received by the Vicar, the Reverend Salter, and Mr. Belk the Churchwarden, who ably explained Mr. Caroe's scheme. The second part of the programme was a visit to Messrs. Robert Lauder's joinery works, where again the party were received and conducted over the works by Messrs. Lauder and their staff, who explained all the latest machinery, etc. which was most instructive.

A feature of the past session has been the students' Saturday afternoon excursions, visiting the principal buildings in course of erection or just completed in the various towns.

The Branch having obtained a badge of office for the chairman, each link of which is engraved with the name of the chairman in his year of office, the ceremony of investiture was performed.

#### BIRMINGHAM ARCHITECTURAL ASSOCIATION



##### PRESIDENTIAL BADGE

*This badge was made at the suggestion of Mr. Paul Waterhouse during one of his visits to Birmingham. It was designed and executed by Mr. Arthur J. Gaskin, formerly of Birmingham, and now of Chipping Camden*





# Obituary

## HENRY LESLIE PATERSON [F.].

The death occurred on 1 March of Mr. Henry Leslie Paterson [F.], one of the best known architects of the City of Sheffield.

Mr. Paterson was the son of the late Mr. Alexander Paterson, for many years editor of the *Barnsley Chronicle*. He was born at Stockton-on-Tees. Educated at Barnsley Grammar School, he was later articled to Mr. W. Senior, of Barnsley.

From 1881 until 1891 he was assistant to various architects in London. He was elected an Associate of the R.I.B.A. in 1887.

He came to Sheffield in 1891, and practised for a year alone, and later went into partnership with Mr. W. F. Hemmell, of Sheffield. In 1903 the partnership was dissolved, and Mr. Paterson continued on his own account.

His competition successes with his partner included the Woodfindin Convalescent Home, Sheffield, erected at a cost of £20,000, and several blocks of Council schools, including Morley Street and Upperthorpe.

After the dissolution of the partnership he was responsible for the conception of Walkley Free Library, Sheffield, several blocks of Council schools and private residences.

Mr. Paterson specialised in the designing of cottages of the garden-city type in Sheffield and Letchworth. He won the gold medal in the cheapest-cottage class at Sheffield Model Cottage Exhibition. He designed a row of 5s.-a-week cottages erected by the City Council at High Wincobank, and another row was afterwards constructed.

Among his more important works of recent years were the Central Store of the Sheffield and Ecclesall Co-operative Society, the Don Picture Palace, as well as shops and factories.

Mr. Paterson was a member of the Council of the Sheffield Society of Architects and Surveyors, on which he had served since 1902, and had almost completed two years as president of the Society. He was also a member of the Council of the R.I.B.A.

He acted as Honorary Lecturer on several occasions in the Architectural Department of Sheffield University.

Mr. Paterson was elected a Fellow of the Institute in 1924.

## JOHN WAYLAND BENWELL [F.].

Mr. Benwell, who died on the first day of the present month, was 67 years of age. He was elected an Associate of the R.I.B.A. in 1882 and a Fellow in 1917. Mr. Benwell was the son of a clergyman and served his articles

with the late Mr. Fowler, of Louth. He came to Carlisle over 40 years ago as assistant to the late Mr. C. T. Ferguson, and after further experience in London, Leeds, York and Bolton he settled down to practice in Carlisle.

Mr. Benwell was a clever and artistic draughtsman and several of his designs have been illustrated in the building journals, including some rather delightful yet simple war memorials. A lover of old work and a traveller, he had filled books with interesting sketches and details. He was a hard worker and relied little on office help; he was often found doing work that would ordinarily have been deputed to a junior. The following are amongst his most important works:—

A charming restoration and addition to Dalston Hall, Cumberland; the Bakewell Almshouses, Balderton, Notts; Garden City and Housing Scheme, St. Anne's, Carlisle; additions to Netherby, for Sir Richard Graham, and a residence at Crofthead for Mr. Fergus Graham; new branch office, Carlisle, for the National Provincial Bank, Ltd.; and the Riding School, Carlisle, for the Cumberland and Westmorland Territorial Association.

About three years ago his health broke down and since then he had been unable to carry on his professional work. He was married, and a widow and two young children survive him.

A large number of professional colleagues with whom he was very popular and other friends, including many prominent contractors who had worked under him, were present at the funeral service.

G. DALE OLIVER [F.] (retired).

## RICHARD WELLINGS THOMAS [F.].

Mr. R. W. Thomas, of Llandrindod Wells, died on 14 February at the age of 49. He was educated at Hereford Cathedral School, and served his articles to his profession in that city. Subsequently he joined the staff of Mr. Stephen Williams [F.], of Penralley, Rhayader, then County Surveyor of Radnor, and on his death, 25 years later, succeeded to his position. He was later appointed as surveyor and architect for the schools of the county under the 1902 Education Act, and as surveyor and architect under the Small Holdings Act. He discharged the duties of these offices with ability and with the complete understanding of the wishes of the county administration. He planned and carried through the erection of new schools at Norton, Nantgwyn, Llandrindod Wells and Llaithdu; the enlargement of the Llandrindod Wells Intermediate School, and many alterations and improvements to the school premises of the county. He also planned and superintended the erection of the County Buildings at Llandrindod Wells. The whole of the houses attached to small holdings in the county were designed by him. In his private practice he designed many of the best houses in Llandrindod Wells. He was an authority on church architecture, and many churches in Radnorshire were restored and enlarged to plans and designs prepared by him. The enlargements of Holy Trinity Church, Llandrindod Wells, were his work; and a number of mansions and county residences in Radnorshire and Herefordshire and adjoining counties were enlarged or improved under his supervision. One of his most recent undertakings away from home was an addition to the Duchess Nursing Home, Beaumont Street, London.

## THE SOCIETY OF ARCHITECTS.

## DISPOSAL OF ASSETS.

The Council of the R.I.B.A. desire to place on record their appreciation of the action of the Society of Architects with regard to the disposal of their assets.

The Society went into voluntary liquidation on 18 June 1925, following its amalgamation with the R.I.B.A. The Society then had already made a donation of £525 to the Architects' Benevolent Society, and, after the Society's liabilities have been satisfied, property of the estimated value of £10,000 has been transferred to the R.I.B.A. Included in this amount are the Society's leasehold premises in Bedford Square, £836 in cash, and invested funds amounting to £4,588, of which £3,263 is earmarked for developing and maintaining architectural scholarships, including the late Society's Victory Scholarship of the value of £150.

The R.I.B.A. will derive further financial benefit by the admission of some 1,400 new members transferred from the Society, representing an increase in revenue from subscriptions amounting to over £4,000 per annum.

## Notices

SPECIAL AND BUSINESS GENERAL MEETING,  
29 MARCH 1926.

A Special General Meeting will be held on Monday, 29 March 1926, at 8 p.m., for the following purposes:—

To read the Minutes of the Special General Meeting held on Monday, 14 December 1925.

To elect the Royal Gold Medallist for the current year. The Chairman to move:—

That subject to His Majesty's gracious sanction, the Royal Gold Medal for the promotion of Architecture be presented this year to Professor Ragnar Ostberg, (Hon. Corr. Member), of Stockholm, in recognition of the merit of his work as an architect.

## THE ELEVENTH GENERAL MEETING.

The Eleventh General Meeting (Business) of the Session 1925-26 will be held on Monday, 29 March 1926, at the termination of the Special General Meeting, for the following purposes:—

To read the Minutes of the General Meeting (Ordinary) held on Monday, 15 March 1926; formally to admit members attending for the first time since their election or transfer.

To proceed with the election of the candidates for membership whose names were published in the JOURNAL for 23 January 1926 (p. 198), and 20 February 1926 (pp. 264-5).

## SPECIAL GENERAL MEETING,

12 APRIL, 1926.

R.I.B.A. REGULATIONS FOR ARCHITECTURAL  
COMPETITIONS.

A Special General Meeting will be held on Monday, 12 April 1926, at 5.30 p.m., to consider the recommendation of the Council that the following Clause be added to the R.I.B.A. Regulations for Architectural Competitions:—

"In the case of small, limited, private competitions where the Royal Institute are satisfied that special circumstances may exist, modification of these regulations may be approved by the Royal Institute.

Competitions coming within the scope of this Clause are—

(i) Where the competing architects are limited by selection or invitation, and do not exceed six in number;

(ii) Where the proposed competition does not involve the expenditure of public funds.

Provided that nothing in this Clause shall prevent one or more members of the Royal Institute from giving advice or preparing sketch plans for the same project for a private client, provided they are each paid a proper fee."

And that the following words be added at the end of the "Note" in the Clause referring to the duties of Assessors:

"Binding conditions should be reduced to a minimum. Instructions to competitors should as far as possible take the form of suggestions, which both they and the assessors may follow as they deem fit."

## R.I.B.A. SESSIONAL PAPERS.

Members are requested to note that at the General Meeting on Monday, 17 May 1926, at 8 p.m., Mr. H. S. Goodhart-Rendel [F.], will read a paper on "The Work of the late Sir Thomas Graham Jackson, R.A."

## EXHIBITION OF GARDEN DESIGNS.

LECTURE BY MR. F. INIGO THOMAS, F.S.A.

An Exhibition of Garden Design (Drawings, Plans, Water colours and Photographs) will be held in the R.I.B.A. Galleries, 9 Conduit Street, W.1, from Wednesday, 7 April, to Wednesday, 21 April 1926 (inclusive), between the hours of 10 a.m. and 7 p.m. (Saturdays 5 p.m.).

In connection with the Exhibition, a lecture on "Gardens" will be given in the Galleries by Mr. F. Inigo Thomas, F.S.A., on Wednesday, 14 April 1926, at 5 p.m.

## VISIT TO CHISWICK HOUSE.

By the kind permission of His Grace the Duke of Devonshire, and Mrs. Tuke the lessee, a visit has been arranged by the Art Standing Committee to Chiswick House, to take place on Saturday afternoon, 10 April 1926. As the number of visitors taking part is strictly limited, members are requested to make early application for tickets to the Secretary, R.I.B.A., 9 Conduit Street, W.1.

## R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28 Bedford Square, London, W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the Committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.



## ELECTION OF MEMBERS, 7 JUNE, 1926.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that if they wish to take advantage of the election, to take place on 7 June 1926, they should send the necessary nomination forms to the Secretary, R.I.B.A., not later than 27 March 1926.

## ADVERTISEMENTS IN THE R.I.B.A. JOURNAL.

The attention of all members of the R.I.B.A. is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. An increase in the income derived from such advertisements is a help to the financial position of the R.I.B.A. and an advantage to all its members. The circulation of the JOURNAL is world-wide, and going, as it does, to more than 6,000 architects in almost every part of the Empire, its potential value as an advertising medium is unequalled.

## Competitions

COUNCIL OFFICES AND FIRE STATION :  
PURLEY.

The President of the Royal Institute of British Architects has nominated Mr. P. D. Hepworth, F.R.I.B.A., as assessor in this competition.

## PROPOSED ISOLATION HOSPITAL FOR INFECTIOUS DISEASES AT DONCASTER.

The Doncaster Town Council invite architects to submit designs in competition for the Isolation Hospital for Infectious Diseases, proposed to be erected on a site off Tickhill Road and Common Lane, Doncaster. Architects competing must be established in private practice. Assessor, Mr. T. R. Milburn [F.]. Last day for questions March 1926. Designs to be sent in not later than 10 May 1926. Premiums, £200, £100 and £75. Conditions may be obtained from the Town Clerk, Town Clerk's Office, Doncaster, by depositing £1 is.

COMPETITION FOR NEW OFFICES, WEST  
BROMWICH.

New offices for the West Bromwich Permanent Benefit Building Society. Open to architects practising within 5 miles of Birmingham. Assessor, Mr. W. Alexander Farvey [F.]. Premiums, £100, £75 and £50. Last day for designs, 31 March 1926. Conditions may be obtained from Mr. John Garbett, the Secretary, West Bromwich Permanent Benefit Building Society, 301 High Street, West Bromwich.

DOWNHAM MARKET U.D.C. HOUSING SCHEME  
AND SCHEME FOR BUILDING LARGE  
RESIDENCES : CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competitions are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competitions.

## MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

## TOPSHAM PUBLIC HALL COMPETITION.

Premiums of £50, £40 and £30 respectively are offered in the above competition. Assessor, Mr. Walter Cave [F.]. Last day for questions, 1 January 1926. Designs to be sent in by 1 April 1926. Conditions may be obtained from the Clerk to the Parish Council, Topsham, by depositing £1 is.

RECONSTRUCTION OF THE MOSQUE OF  
AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

## LEAGUE OF NATIONS.

COMPETITION FOR THE SELECTION OF A PLAN WITH A  
VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL  
FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

CHINGFORD COUNCIL OFFICES  
COMPETITION

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

**AUSTRALIAN WAR MEMORIAL—CANBERRA.**

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon, on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

The President of the Royal Institute of British Architects has nominated Sir Reginald Blomfield, R.A., F.R.I.B.A., to act as adjudicator in connection with this competition.

**AUSTRALIAN NATIONAL WAR MEMORIAL AT VILLERS BRETONNEUX.**

The date for the delivery of designs in connection with this competition has now been extended from 30 April to 31 May 1926.

**SCOTTISH LEGAL LIFE ASSURANCE SOCIETY:**

NEW AND ENLARGED PREMISES.

The President of the Royal Institute of British Architects has nominated Mr. John Keppie, A.R.S.A., F.R.I.B.A., as Assessor in this competition.

## Members' Column

**PARTNERSHIPS WANTED.**

A.R.I.B.A. (36), with good all round experience, seeks a partnership on the probationary basis with a well-established architect.—Box 5326, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

A.R.I.B.A., aged 36 years, seeks partnership. Acquainted with English and Colonial work, and is not afraid of work. Small capital available.—Apply Box 3326, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

A.R.I.B.A., with small practice, desires to meet architect with view to partnership. Would be willing to work for a probationary period. Advertiser has carried through important contracts and is properly experienced in practice and design.—Apply Box 2326, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

**CHANGE OF ADDRESS.**

MR. GORDON GRIFFITHS has removed from Whitchurch, to 21 Dumfries Place, Cardiff. Telephone: Cardiff 7768.

MR. J. W. WARD [L.] has changed his address from "St. Helens," Shalford, to "Wendover," Shalford, Guildford, where he will be glad to receive catalogues, etc., of manufacturers.

**OFFICE ACCOMMODATION WANTED.**

ASSOCIATE wants the occasional use of an architect's West End office for interviewing clients.—Reply Box 5445, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

F.R.I.B.A. wants small, quiet, unfurnished office, with use of telephone and arrangement for share of drawing office.—Apply Box 1168, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

**FLAT TO LET.**

ASSOCIATE will have self-contained upper part of his house to let after 15 April, containing three good rooms, kitchen, bathroom, and small yard, near Gipsy Hill Station.—Apply Box 3223, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

**FOR DISPOSAL.**

SET of Institute Journals, third series, volumes 1-12, calf bound. From 1905-1925, loose.—Reply Box 9248, c/o Secretary R.I.B.A., 9 Conduit Street, W.

**A.B.S. SCHEME OF PROFESSIONAL INSURANCE.**

Sickness insurance to be complete must ensure provision in the event of a permanent breakdown in health. A temporary illness may be costly, but a permanent and protracted illness may have crippling effects.

The A.B.S. recommend to architects an attractive policy covering all sickness and all accidents, which cannot be discontinued by the company before the agreed age provided the policy conditions are complied with. Disablement benefits are payable from the first day of incapacity and continue as long as disablement lasts.

Please address all enquiries to the Secretary A.B.S. 9 Conduit Street, W. Telephone, Mayfair 434.

## Minutes X

At the Tenth General Meeting (Ordinary) of the Session 1925-26, held on Monday, 15 March 1926, Mr. E. Guy Dawber, F.S.A., President, in the Chair.

The attendance book was signed by 23 Fellows (including 7 members of the Council, 18 Associates (including 1 member of the Council), 7 Licentiates, 1 Hon. Associate, and a very large number of visitors.

The Minutes of the meeting held on 1 March 1926, having been taken as read, were confirmed and signed by the Chairman.

The Hon. Secretary announced the decease of:

Henry Leslie Paterson, elected Associate 1887, Fellow 1924. Mr. Paterson was the President of the Sheffield, South Yorkshire and District Society of Architects and Surveyors, and was the representative of that Society on the R.I.B.A. Council during the last and current Sessions.

John Wayland Benwell, elected Associate 1882, Fellow 1917.

Alexander Gardner, elected Licentiate 1911, Fellow 1925.

David Davies, transferred to Licentiateship 1925.

Albert Edmund Algar, transferred to Licentiateship 1925.

And it was RESOLVED that the regrets of the Institute for their loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

Mr. A. R. Robertson [F.], attending for the first time since his election, was formally admitted by the President.

Mr. George H. Duckworth, C.B., F.S.A., having read a paper on "The Making of a Slum," a discussion ensued, and on the motion of Lieut.-Colonel C. B. Levita, C.B.E., M.V.O. seconded by Dr. Raymond Unwin [F.], a vote of thanks was passed to Mr. Duckworth by acclamation, and was briefly responded to.

The meeting closed at 10.20 p.m.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

**R.I.B.A. JOURNAL.**

Dates of Publication.—1926: 20th March; 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

VOL. XXXIII. No. II

THIRD SERIES

10 APRIL 1926

## Contents for 10 April 1926

	Page
THE PONT MARIE, PARIS. From "Old Bridges of France." Frontispiece .. .. .	<i>To face</i> 327
THE MAKING, PREVENTION, AND UNMAKING OF A SLUM. By George H. Duckworth, C B., F.S.A. .. .. .	327
Discussion .. .. .	334
SIR JOHN VANBRUGH. By Arthur T. Bolton .. .. .	338
"OLD BRIDGES OF FRANCE," Illustrated. By Henry M. Fletcher .. .. .	340
THE DEVELOPMENT OF LONDON AND THE HOME COUNTIES : DEPUTATION TO THE MINISTRY OF HEALTH. By H. V. Lanchester .. .. .	348
DEVONSHIRE HOUSE BUILDINGS. By Charles Marriott .. .. .	349
THE LIBRARY : Notes on Recent Acquisitions .. .. .	350
THE FIRST INTERNATIONAL CONGRESS ON ARCHITECTURAL EDUCATION .. .. .	351
CORRESPONDENCE :	
THE WIDENING OF ROADS. By Frank W. Simon .. .. .	351
JUBILEE OF THE ROYAL SANITARY INSTITUTE. By Sir Henry Tanner .. .. .	351
THE ROYAL GOLD MEDAL FOR ARCHITECTURE .. .. .	352
THE GARDEN CITIES AND TOWN PLANNING ASSOCIATION .. .. .	352
OBITUARY :	
JOHN WYNNE .. .. .	352
NOTES FROM THE MINUTES OF COUNCIL .. .. .	352
CONFERENCE ON HOUSING AND TOWN PLANNING AT VIENNA .. .. .	353
BOARD OF ARCHITECTURAL EDUCATION .. .. .	353
NOTICES .. .. .	353
I.B.S. SCHEME OF PROFESSIONAL INSURANCE .. .. .	354
COMPETITIONS .. .. .	354
MEMBERS' COLUMN .. .. .	355
MINUTES .. .. .	355

L



THE PONT MARIE, PARIS  
(From a water-colour drawing by Pierre Vignal)

From *Old Bridges of France* (see pages 340-347)





# The Making, Prevention, and Unmaking of a Slum

BY GEORGE H. DUCKWORTH, C.B., F.S.A.

[Read before the Royal Institute of British Architects on Monday, 15 March 1926.]

YOU will wonder, in the first place, how it came about that I was invited to address an expert audience like the present one on the subject of London slums and their lessons, so I will begin by saying that for ten years I worked with the late Mr. Charles Booth in connection with his social enquiries into the life and labour of the people of London. Mr. Booth, I should perhaps explain—since the two are sometimes confounded owing to similarity of name—had no connection with the late General Booth of Salvation Army fame, nor had he, I imagine, much affinity with him in work or in outlook, though both were keenly interested in social problems and their solution.

Mr. Charles Booth was a Privy Councillor, a Fellow of the Royal Society, a President of the Royal Statistical Society and a Doctor of Letters. He was also a shipowner, a man of means, a man of untiring energy and perseverance and endowed with a vivid and even a romantic imagination. Withal, he was a man of frail health and possessed by a most earnest desire to seek truth and ensue it at all costs. In his early days his theories had been hampered by want, in his opinion, of sufficient facts to support them. As business prospered he determined to devote a large slice of his wealth to the acquisition of facts about life and work in London.

Part of the task assigned to me was the revision and extension of a map which he had projected showing the social condition of the inhabitants of every street, court and alley within the boundaries of the metropolis. The map in question, on a scale of

24 in. to the mile, covering about 20 square feet of wall space, is before you. It was shown at the Great Exhibition of 1900 held in Paris and is given on a smaller scale in the sixteen volumes of *Life and Labour in London* which embody the results of Mr. Booth's enquiries. The colours in the map denote comparative social condition. Black means "semi-vicious"; dark blue, "very poor"; light blue, "poor"; purple, a mixture of "poor" and "fairly comfortable"; pink, "fairly comfortable"; red, "well-to-do"; yellow, "rich."

I propose to describe to you certain poor areas on the north side of the Thames which I revisited last week for this purpose, to note their peculiarities, their origin and their predispositions, and to call attention to such changes as have taken place since I first visited them nearly thirty years ago.

[The lecturer then passed in review certain selected areas in Bromley, Bow, Fulham, Notting Dale, Kensal New Town, Paddington, Hoxton, Haggerston and Bethnal Green, giving descriptions of individual streets, the appearance of the houses and the appearance of the inhabitants, especially of the children.]

With regard to site, he called special attention to the danger of isolation and to contributory causes of depression in the contiguity of workhouses, cemeteries, docks, gasworks, railways and canals. With regard to the streets themselves, he noted a remarkable improvement in paving and scavenging by local authorities. With regard to the inhabitants, he reported far less drunkenness among the adults, but

more betting and greater expenditure on pleasure and dress; while, with regard to children, the improvement was everywhere visible—and this was so even in the poorest and most vicious streets—of their condition, whether in nutrition, in cleanliness, in dress or in general well-being.

He then summed up his review in the form of answers to the questions put to him by the Institute.]

We are now, after our survey of certain blue patches on the map, in a better position to give an answer to the questions put to me on the invitation to give this address.

The first question was, *How do slums actually come into being? That is, what is a slum?*

A slum, then, is a street, court or alley which reflects the social condition of a poor, thriftless, irregularly employed and rough class of inhabitant.

Its genesis may be due as much to the landlord as to the tenant, for the landlord may have been to blame for building bad houses, in which case he cannot expect to get good tenants; or he may have been careless in his selection of new tenants and his arrangements for rent collection and management may be indifferent.

The inhabitants are not necessarily *very* poor or necessarily bad; they are often poor through injudicious expenditure and sometimes vicious. Sometimes they are both. But they are always rough, thriftless and irregularly employed.

The outward signs are bread and litter in the streets; windows dirty, broken and patched with brown or white paper; curtains dirty and frayed and blinds half drawn and often hanging at an angle. The street doors are usually open, showing bare passages and stairways lacking balusters, while the door jambs are generally brown with dirt and rubbed shiny by the coats of the leisured class, whose habit is to lean up against them. The cats are seldom lean, for oddly enough in a working class district lean cats are more often a sign of vice than of poverty.

The site of a slum is generally a pocket off a main street, or a street or nest of streets where through traffic has been made impossible by the intervention of canals, railway embankments or the determination of the original inhabitants or owners to regard their persons or their land as something select and inviolable and to be maintained as such without reference to their present or future surroundings.

The inhabitants themselves may be either the scum or dregs of the population, drawn from all classes and all trades and frankly dependent on what they can pick up casually in a great town. But, apart from these they are apt to be associated with those whose work, while it is normally unpleasant or irregular, is yet definite work and honest work. The slums tenanted by these last used to be described in our notebooks for Mr. Booth concisely as "Gas-works poverty"; "Coster poverty"; "Dock and Waterside poverty" so far as men were concerned, and "Jam works" and "Laundry poverty" particularly as affecting women. These names denote work that is essential for the wellbeing of the community. Some of it is work that is often associated with drinking habits, though the improvement in this respect is on all sides reported to be remarkable. Gas-works poverty especially is a description that means less now than formerly owing to the replacement of handwork by machinery.

Other short descriptive terms, which carry no such necessary connotation, were "Workhouse poverty," which occurs and recurs in the neighbourhood of workhouses, and "hereditary poverty," as in Westminster, where the roots of poverty and crime have their origin deep-seated in history in connection with the Abbey's benefactions and its rights of sanctuary for criminals; or "parasitic" poverty and "village" poverty, the former being found in close touch with the richer quarters, where a race of poor dependants has grown up encouraged by the indiscriminate giving of the well-to-do, while allied to it is village poverty, where London in its steady expansion engulfs villages, turning their manor houses and gardens into rows of streets and leaving their poor undisturbed.

A slum generally contains representatives of three or more of these forms of poverty, though it depends on the district which one of them will predominate. We may perhaps then define a slum as a street, closed court or alley tenanted by a casual, thriftless and rough class of inhabitant, not necessarily vicious but apt to contain bad characters.

Now we come to the reply to the second question, which was:—

*What is it that gives a start on the downward path to what has once been a decent residential district or a clean new suburb?*

That the original inhabitants move away and



THE STREETS OF ST. LEONARD'S STREET AND THE LEVENS ROAD  
(BROMLEY AND BOW) IN 1900



The black streets are those marked light blue, dark blue and black in Mr. Charles Booth's Social Map of London  
Map 1.—The map shows an area closely hemmed in by railways and canals, with contiguous gas-works and workhouse

EAST LONDON  
THE BOUNDARY STREET AREA (BETHNAL GREEN) IN 1900



Map 2.—The blank space in St. Philip's Parish is the slum clearance effected by the L.C.C. and now rebuilt. The effect on the surrounding streets is shown by the preponderance of the black streets



# WEST LONDON

## NOTTING DALE AND KENSAL NEW TOWN IN 1900



Map 3.—The Notting Dale area, in the lower left-hand corner of the map, shows the district affected by the clearances in the Strand; while the Kensal New Town area in the north shows the district enclosed by canal, railway and gas-works, which was affected by the clearances

# WEST LONDON

## THE STREETS OFF THE WANDSWORTH BRIDGE ROAD (FULHAM) IN 1900



Map 4.—The Langford Road area, off the east side of the Wandsworth Bridge Road, shows the streets affected by clearances in the Strand, Soho and Drury Lane



that they are followed by those who are of a lower social grade than themselves, giving here and there an opportunity for new slums to come into existence, is due to the centrifugal force operating in every prospering and expanding city, which takes the opportunity of each addition to facilities of locomotion to hurl its inhabitants from the centre to the circumference, leaving the poorest and those whose work necessitates it in the centre and, if at all, to be the last to leave.

As each ring presses outwards an opportunity is given to members of an inner ring to take the place of those who have left. Those with increasing incomes and increasing families are the first to leave. Their natural successors are those whose increasing families and prospects, though on a lower level than the foregoing, enable them to step into their shoes. The move for each means a rise in the social status and should connote a permanent rise in the standard of life. This is the normal and natural and desirable form of a city's expansion and development.

But the abnormal and unnatural and undesirable sometimes happen. This is noticeable when sudden clearances are made in the centre and blocks of population are disturbed. If, as we have seen in the case of the courts off the Strand and Drury Lane, the disturbance coincides both with bad building and over-building in the circumference, then the very poor will overleap the intervening spaces, and we see the creation of slums in Notting Dale and Fulham, in cheap houses which were intended to attract a black-coated class of city workers who, instead, have found new homes elsewhere; or if there is a district of similar character near at hand the displaced poor will crowd into it and make it worse than it was before—witness the happening in the Boundary Street area of Bethnal Green and in Hoxton.

Or, again, it may happen that there are no natural successors to take the place of those who leave. This is particularly noticeable in districts that have been tenanted by the well-to-do. Hence the fate of the moderately large detached house with the moderate-sized front and back garden in the Brecknock Park district and the downfall of the large houses and large gardens round Clapham Common. The large house and garden lends itself to immediate destruction and rebuilding and development for a comfortable, though mostly a non-servant keeping class, who eagerly tenant the small houses

provided for them. While the moderate garden and its detached house does not attract the speculative builder, but tempts the owner to a conversion into flats which are not attractive to those who might otherwise come into the district. It may also be that these houses undergo little or no conversion but descend from being let as furnished rooms or flats to being taken as unfurnished rooms or flats by the poor, for whom the arrangement of the houses is thoroughly unsuitable; where there is and can be no supervision and which were, when I last saw them, degenerating into "slum" property.

From these we pass to the reply to the third question put to me, namely:—

*What is the actual process of degeneration as observed by those who have made a study of the question?*

Instances of degeneration have already been given in connection with the natural expansion of London, and similar instances, so far as I have had occasion to observe them, will also be found in other great and growing cities, and probably in all cities wherever they are situated.

Speaking generally, the poor are the last to leave, and it will be found that the centre of London and other large towns from being residential tends, as facilities for locomotion increase, to become more and more absorbed by business houses and warehouses, workshops and hotels, while the inhabitants of the inner rings sink steadily in the social scale.

This question, however, as I read it, has reference more to actual cases of degeneration due to intermittent or abnormal causes, as for instance:—

(a) The wholesale destruction of a slum area in the centre where no convenient opportunity exists for adding to the overcrowding in a similar area in the immediate neighbourhood.

The classical example here, when I was perambulating London, was the destruction of the courts off the Strand and the wholesale influx of their inhabitants into N.W. Kensington into 2½-storied houses which had been built for a clerical class. The houses were badly built, a comfortable class would not occupy them: plenty of other houses were to be had: the owners could not let them and suddenly they were discovered by the outcasts from the Strand. First one or two families came; probably the more enterprising and less irregularly employed came first; then with the herd instinct

of the poor they trooped in and the district became derelict. On the map you see the result—blue and dark blue lined with black.

Or, again, there is :—

(b) The disturbing and often disastrous effect of exhibitions, such as Earl's Court and the White City.

Here the sudden influx of a fleeting and temporary population is a great strain on the surrounding district. In the first place there are workmen preparing the ground and erecting the Exhibition buildings, then come the exhibitors with their exhibits, and lastly a horde of waiters and waitresses and showmen and showwomen drawn from all parts of the country who must find a bedroom for the duration of the show. Some of the incomers are shady characters. Earnings are high for a limited period. Rentals of furnished rooms are very high, the fact being that owners are not particularly anxious to let their rooms to birds of passage unless the remuneration is exceptionally tempting. And, however great may be the influence of such exhibitions in other directions, it must be admitted that they are certainly upsetting to the neighbourhood in which they are held.

At Wembley, I believe, a special effort was made to cope with the danger, and great success attended the provisions made for the quick arrival and quick departure of those employed. In this way the pressure on the immediate neighbourhood was relieved. This is an important point and should be provided for by all responsible for exhibitions wherever they are held.

Another danger, though it is not a general one at present, is overhousing. Some may be surprised to hear that in places there is overhousing now, though it is rare. I am rather thinking of the overhousing that followed on the extension of the District Railway about the end of the last century. Two lessons are to be drawn from it which it may be useful to recall. One, that in the ordinary course of events speculative building, without Government assistance, normally accompanies the extension of facilities of locomotion; and, secondly, the desirability of watching and even of preventing an uneven distribution of these facilities.

In the Fulham District, at the time of which I am speaking, there were so many small houses available that there were tenants who would only live in new houses; they came for a year, took off the freshness of a house and then passed on. Concurrently there

was a steady demolition of the small poor courts in the centre, with the result that the poor from the centre were taken therefrom and dumped in the outskirts both east and west. If the house had been shoddily built in the first instance it was difficult for it to recover from the initial shock. If, on the other hand, it had been well built and the neighbourhood was suitable to permanent residents, it shook itself and recovered.

Now I reach the reply to the last question put to me, which was :—

*Are there any comparatively slight causes which if neglected lead to eventual decay?*

Here I venture on a few categorical statements, many of which will have occurred to you on seeing the location of the blue patches in Mr. Booth's map. They must be regarded as suggestions only, though they are the outcome of personal experience, since the basis on which they are founded may have been insufficiently broad.

1. *Discourage building in closed pockets off main streets.*—This sounds easy enough. In practice it is most difficult and a most fruitful source of future degeneration. Landlords desire it, for it marks off their own property from that of neighbours. Architects approve of it, for it enables them to point to a finished jewel of their own design. The prospective first tenants almost insist on it, for they wish, as the phrase is, to keep themselves to themselves.

Nevertheless I would most earnestly press upon all those engaged in the siting and planning of new housing schemes for the working classes to arrange them so that there is free ingress and egress on at least four sides, and that even though the surroundings may now be green fields to arrange to leave a space on three sides between the house groups and to build roads with incompleting ends, so that when new buildings absorb these fields both the buildings and the roads shall conform in appearance and width to the standard which you will have set them.

2. *Avoid made ground, more especially ground made up from decomposing refuse heaps.*—In any case satisfy yourselves that the made ground has settled properly and that the ancient refuse heap is dead so far as decomposing material is concerned.

3. *Build in blocks of four or six, rather than in semi-detached houses.*—My experience here is that in this way you secure some economy in building, greater unity in design, more even temperature in summer and in winter, fewer complaints of damp-



ness owing to condensation, greater shelter for the flowers and vegetables in the back gardens and less draught for the old people and children who sit out or sleep in them. Further, I believe that less trouble over smoky chimneys is likely to occur in blocks of four or six than in semi-detached houses.

4. *Give a common frontage in place of front gardens and maintain it out of a common fund.*—One ill-kept front garden is apt to spoil the self-respect of a row.

4. *Give seclusion to your back yards and provide for a back garden, however small.*—This needs no elaboration.

So far as regards the inside of your houses, my suggestions are :—

1. *Pay particular attention to the course and solidity of your chimneys, and to the suitability and setting of the ranges chosen for them.*—No single cause leads to greater discontent, expense and a readier degeneration as regards its tenants than the knowledge that the chimney smokes.

Air currents and the manner in which they are affected by trees or by new houses have not yet received sufficient attention by architects.

2. *Plan for through draughts and sunlight.*—This, too, is obvious and needs no elaboration. If possible, plan your living room to stretch from one side of the house to the other.

3. *Provide for a parlour as well as a living room, however small.*—Let a parlour have a place in every new building. It is an emblem of even greater value than the bathroom. The parlour is the library and museum of the cottage, the home of the piano, the Sunday withdrawing room, the place of reunion on solemn occasions, the last resting place of the coffin, an extra bedroom in case of need, and the meeting place of engaged couples. Do not attempt to place it anywhere except on the ground floor.

4. *Avoid sharp turns in the stairway so as to allow the coffin to be carried down decently.*—A coffin slung from a window will disaffect a neighbourhood.

5. *Provide for an indoor holding place for the perambulator and remember that the good mother will not leave her perambulator in an outdoor shed.*

6. *Avoid steep stairs for the sake of old people and children and always provide a handrail on both sides.*

7. *Let your larders have an outside window.*

8. *Site your fixtures, such as sinks, coppers, plate-racks, dressers and cupboards, so as to involve as little walking from spot to spot as possible.*

This is the last of my suggestions with regard to new schemes. Nothing can be new in them to the experts in my audience ; to them they will only be reminders, and I hope they will add to them. They are at any rate an attempt out of my personal experience to answer the questions that were put to me.

Having said so much about degeneration and its causes and its preventives, I should like to be allowed to add a very short word on regeneration and the methods advocated for the rehabilitation of slum property.

The commonest method is destruction. We have already seen one danger in this method which involves the removal of the very poor from one parish and its dumping into another. In such a case the net result to the community is worsenment and not betterment. New houses are rendered uninhabitable and a new tradition of thriftlessness is set up or a possibly dying tradition reinforced, whereas the aim should have been to encourage a rising standard of life with an upward movement from below. One parish and set of local authorities is relieved of a grievous burthen, for which they are probably in part responsible, to the detriment of another which has had no such responsibility and may have no knowledge of the presence of these undesirable immigrants until it is too late to deal with them effectively.

Some years ago, when I was examined by a Committee at the Ministry of Health, with the present Minister of Health, Mr. Neville Chamberlain, in the chair, and called attention to the dangers attending the demolition of slum property and the dispersal of its inhabitants to form seed-beds elsewhere, Mr. Chamberlain asked me whether it would not be possible to deal with the property and its inhabitants as it stood. My reply was that in some, perhaps in many, cases these slum areas were not unconnected with members of the local councils, and it was a case of *quis custodiet ipsos custodes*. I feared therefore that the proposal was impracticable.

He then made what, I think, was and is a brilliant suggestion. Let the responsibility for these slum areas remain where it is. Let them be purchased on a fair valuation and place them under the local council as a corporate body. This done,

recondition them so far as is absolutely necessary. Place them under the supervision of rent collectors and managers trained on the system advocated in principle and in practice by the late Miss Octavia Hill; and, as the tenants become civilised, let them be decanted family by family into houses or buildings prepared for them where educative supervision, as in the Guinness Buildings, may still have regard for them. As they leave, and only then, pull down the houses they have vacated.

This, very briefly, is the system that I advocate for dealing with slum property of long standing.

Lastly, there is the need for a proper supervision by local authorities of the normal movement of population in and out of districts already built.

I have already spoken of points that in my opinion require attention in districts where new building is in progress, and of the action required in slum areas to mend them and end them. What of those which are not yet slums but might become slums as soon as new building overtakes the immediate demand?

Here I can only suggest constant watchfulness and interchange of opinion between the surveyors and architects of the local councils. To give one

instance only. I very much doubt whether Fulham was aware of its danger from an overflow from Drury Lane and Soho into the streets lying east of the Wandsworth Bridge Road when that took place at the end of last century, or of its possible danger in the streets lying west of the Wandsworth Bridge Road as soon as the present tenants find a chance of moving elsewhere. And there must be many other similar instances. Yet every borough council is conscious of the streets within its boundaries that are shoddily built, or contiguous to streets that are already slummily inclined, or isolated in the sense that there is no free current of ordinary traffic through them. The danger spots are obvious when you consider Mr. Booth's map more closely, and the danger signals stand out clearly in the patches of blue and black that mark some of the most unsuspected areas.

To borough authorities, therefore, I venture to say: mark down these spots and confer at regular intervals with the L.C.C. and all other councils in the metropolis, so that demolition, rebuilding and betterment in one direction may not be the cause of worsement, and possibly the seed-bed of greater degradation, in another.

## Discussion

THE PRESIDENT, MR. E. GUY DAWBER, IN THE CHAIR.

Col. C. B. LEVITA, C.B.E., M.V.O., D.L.: I have the honour to propose a vote of thanks to my old school-fellow, Mr. Duckworth, for his most interesting lecture. He has shown what a careful analysis he has made of London conditions over a very long period. I have had knowledge of this before, and of his work, and I think that his conclusions are, generally, very sound. Obviously, if we could prevent slums occurring we should save a great deal of money and a great deal of unhealthiness. But when we consider how this great city, and other cities, have grown up, without any proper laws for town planning, without any proper restraint in building from Building Acts, and so forth, we may congratulate ourselves, I think, that London is as good as it is. I look forward to the application of town planning to built-up areas, for I am sure—and the more I study the business of dealing with slums the more certain I am—that until you get zoning and town planning applied to built-up areas you will not get over the difficulty. In London you will not get the full effect of the application of town planning for a hundred years, and every day that is delayed in putting laws into force is creating troubles

for the future which can only be corrected at vast expense.

I am glad Mr. Duckworth mentioned Notting Hill Dale. It is not as bad as he thinks it is. I have represented it on the London County Council since 1911; therefore I know it very well. The people have the merit—poor though they are, and bad though the area is—of having a proper sense of local government! But Notting Hill Dale is, of course, a particularly good example of this change in the use of the buildings that is going on. Local Authorities have to understand clearly what is meant by a slum before we begin to deal with it. After all, is it the inhabitants you are after, or is it the fabric, the house? We can only deal with the fabric from the housing point of view. We have to look to social uplift and education and other ameliorations which do not come under the direct control of Housing Authorities; but the Local Authorities in London and elsewhere are trying at the same time to improve character, just as they are trying to improve the slum. For instance, in North Kensington, the lecturer spoke of the "battleship effect" of the great schools standing up amid the



houses. North Kensington is a place with a history, as the lecturer showed you: bad characters arrived and stayed there. The Education Authority have made special experiments there. It is recognised that for centuries they have been a feckless people, few in permanent employment, and that the children were brought up to the lives their fathers and mothers led. Therefore the London County Council Education Authority brought in special types of schools and has given a special form of technical education to the children in that neighbourhood, with the most magnificent results. I recommend anyone who wants to see an educational experiment which will do something to remove the slum, to go down to Sirdar Road School, which is about to be rebuilt, or go into the "Soapsuds Island" and see the big school there, where technical education is creating a revolution. As regards the houses, we, as a Housing Authority, can only deal with areas or houses which are themselves insanitary; and when a house or an area is declared to be insanitary, you must do more than Mr. Duckworth would like to do in putting it into good condition. I am not a believer that it would be a success to recondition old property on a large scale. We have tried it in North Kensington and in Camberwell. It costs more money than reconstruction; you never get over the inherent faults of the lay-out, and you are face to face with the fact that the Local Authority are the owners of property which is bad property. I want to see more powers, which I think are coming towards the end of the year, so that you can hold property longer, and, in certain cases, can recondition houses. As a solution of the general problem in London, however, I think reconditioning is not a practical proposition.

There is another point. Mr. Duckworth pointed out how, in our slum clearances, we drove the residue, or the mass of the people in the slum, into surrounding districts. That is so, for various reasons. One is, that the true slum maker is not a person who will submit to the necessary small amount of discipline which you require in a reconstructed area in a tenement house. Another great difficulty in London at present is that in many of these slums the dwellers are not paying rents, and have not done so for a long time; the landlords have run away rather than face the repairs, and we cannot trace them. That class of person you cannot hope to put into your new tenement house. I submit—and this is a point on which my friends at the Ministry of Health only moderately agree—that when you are trying to clear 25,000 to 30,000 slum dwellers out, and you cannot rehouse many of them, you have to try to create some sort of accommodation for them at very moderate rents. There is nothing between the common lodging-house and the high-class tenement which the aristocracy of labour live in. I have tried to get a simpler form of building with a lower standard of amenities which, though it will cost more, will, without

breaking the rent standards, enable you to house these poorer people.

The question of management is a very important one; in North Kensington we had the full benefit of the Octavia Hill experiment. There are to-day in North Kensington housing associations, and there are similar associations springing up in different parts of London. A housing association which sets up to be merely a critic, sometimes a political critic, is not doing useful work, but those who are working on the Octavia Hill lines are doing very valuable work.

Dr. RAYMOND UNWIN [*F.*], in seconding the vote of thanks, said: It gives me very great pleasure to second this vote of thanks and to find myself, in the main, in such very hearty agreement with much that the lecturer has said, and also with much that has been said by the proposer of the vote of thanks.

With regard to slums, I think it has been of great value to us, as architects and as public officials, to have it brought home to us so thoroughly that the slum is not a simple problem, either of criminality, of poverty or of despicable structure; but that it is a compound problem, that it is due to action and reaction of environment upon character and character upon environment; that it is due to a complicated set of circumstances, to something in the social body which is more nearly than anything akin to a disease in the human body; and that, therefore, there is no short-cut cure, but that we must have a comprehensive attack along all the lines. There are no purely material means which, taken by themselves, can cure the evil. I believe, for instance, that questions of amenity, of order, of light—that questions even of design have an enormous influence in saving districts from becoming slums and in helping to redeem them from being slums. I believe we can find examples of the remarkable and prompt influence of improved material conditions upon the character of the slum-dwellers. It is only a few weeks since, in a town smaller than London, and therefore probably more easily managed—in the town of Manchester—I had the pleasure of going round the area of a new housing scheme on the outskirts of the town, where 80 per cent. of the population of a bad slum had been removed into the new houses. I went round that slum six or eight months ago, just at the time a start was being made to clear it. It had all the marks of a slum that we have heard described, though perhaps it had not some of the features in the character of the people, otherwise it could not have responded so quickly as it did. I was not able to detect anything worse in the character of the gardens, in the fancifulness of the curtains, and in the general tidiness of the houses inhabited by the slum-dwellers than in those inhabited by ordinary people. I do not say that would be possible with the slum-dwellers of the traditional character such as have been referred

to in regard to London. I have seen the same kind of results produced on a similar scale in Wakefield, and I would urge that that kind of evidence is of great importance as showing, not that you can cure the slum-dweller by material means, but that the material means have their power of reaction, and that we cannot afford to neglect them. I want to urge the importance of light. It was my duty, the other day, to go round a considerable slum area in London which was of a very complex character. Some of the streets were fairly wide and had fairly high buildings, three and four storeys, and I went into one of these little cul-de-sacs, which, although it had a passage through it, had no driving way. I thought, "Why is this street so much pleasanter than any other street I have been in here?" It dawned on me that the houses were one storey high—it was getting dusk—and there was a decent amount of light; the difference made on me was such that I felt, if I had to live in a slum area, I should try to live in a place where I could get light. I think light is a very important factor in its spiritual effect. I think, too, that space in which to indulge in a subsidiary occupation, such as a little back garden, is a matter of great importance. But if you have not enough light, so that things will not grow in your little back garden, it is liable to rapid degeneration.

I agree with what the lecturer said as to the importance of circulation. I do not understand him to mean that in no case can you have a little cul-de-sac of houses; so long as it is sufficiently open there is no objection. But that you should have a large area of stagnant life, in which there is no flow of social and material life, is one of the most likely ways of producing a slum. I think one of the ways in which you can clear it is to open up that area with some through communication, and, if possible, some open space with something green about it.

I would like to emphasise that, while in agreement with many of the lecturer's suggestions, I would like to put, even before many of them, the question which Colonel Levita dealt with—the question of planning. The question of securing a certain degree of stability in all the districts of a town, of distributing their different functions, of getting them into their right places, and then securing that they shall be stable until the time comes when there must be a change, and then let the change be on an orderly plan and carried out as a complete and orderly scheme, is of the utmost importance. Nothing creates slums more than irregular and haphazard changes, which are always preceded by a depreciation in the character of the property. Land which has ceased to be good residential property and has not become good commercial property, in the interval becomes a slum. We need powers for the planning and zoning of built-up areas. My observation of what has been done by this means in America confirms me

as to the practicability of it, and I think it is one of the most important things to do. Then, I think, gradually—for it will take time—we shall be able in the present, and much more easily in the future, to prevent the possible growth of slums.

Mr. Arthur CROW [F.]: I feel tempted to break a lance with Colonel Levita on the question of reconditioning. I feel that much could be done by some method of the kind. Nowadays, in some districts, on the slightest provocation, when a wall becomes dangerous the tendency is to say that the building is not worth keeping up, that the cost of repairs is so great that it does not pay. Very often the owner says, "I shall let the County Council do what they like with regard to this bulging wall, I shall not spend money on it." The wall is pulled down, the tenants board themselves in, and gradually the whole structure goes from bad to worse until it is finally demolished. I think that in many cases a little money spent compulsorily would keep these houses going for another ten or twelve years. If there were a proper system of zoning in the old areas, and certain districts were not allowed to be invaded by factories, there would be enough public spirit in both owners and occupiers to keep the property in decent order. But where the owners find that the land has a greater value for factories they do not care. Certain districts should be protected from invasion by commercial premises, especially in the inner belt of London, where houses are so necessary. I thought Colonel Levita put his foot down unnecessarily heavily on the question of reconditioning, for there is much to be said in its favour.

Mr. G. L. PEPLER (Ministry of Health): It gives me great pleasure to support the vote of thanks to Mr. Duckworth, especially as I was a member of the Unhealthy Areas Committee before which he gave such valuable evidence. While hearing his paper, a few points occurred to me. First, and pre-eminently, the value of research. Seeing the big map on the walls, and having read Charles Booth's books, make one realise the value of getting to understand causes. This map dates from 1899 to 1900, and one feels that something of the kind is due again. It is interesting to hear Mr. Duckworth's comparison with thirty years ago; though it is rather depressing to find that some of the former blue has gone black. I do not think much of the black has gone red, and none of it has gone yellow. So it rather indicates that the causes, whatever they were, are still operating. As he went round the map, I jotted down some of the reasons he gave. Sometimes he referred to isolation, to an area being surrounded by a river, by a railway, by gasworks or a cemetery; and though he says, rightly, that the gasworks worker is not now a type of awkward tenant, he emphasises the matter of isolation, and it is a question to which we who are concerned with town planning should give careful attention. I wonder



whether there is not too great a tendency to segregation in some of our new planning, to say, "We will have the working classes here, the better classes there," and so on. Mr. Duckworth referred to a particular street, and seemed down on the cul-de-sac. I do not know how he dared to do that with Dr. Unwin here, and I had visions of Asmunds Place at Hampstead; I do not think that will become a slum. It is the way the thing is done, rather than the mere placing of it there. And I have heard from a number of people in towns the same criticism as Mr. Duckworth made. Usually they have said it meets the case if there is a footpath way, so that you get people passing through. But in these days a cul-de-sac is of very great value if it keeps out through-motor traffic. As I heard Mr. Duckworth I was trying to apply all these lessons to our modern conditions and experiences, to see if we were benefiting by past experience. He referred to jerry-building as a cause, and here again I wondered whether to-day we are thinking enough about quality, because, whatever you build, unless it is of good quality, is an inherent slum, unless it is a temporary shelter, which it is understood is to be cleared away when it has served its purpose. There was a reference to village poverty, and that concerns us greatly round London. Where the sweep of London comes it destroys the good and the big houses; they leave the bad. That is a terrible reflection on modern civilisation.

As he mentioned exhibitions, I thought it would give me the opportunity to air a pet theory: Why has not the greatest City in the Empire its permanent exhibition ground? Here is London; it has an exhibition at the White City and then it has to go to Wembley. Presumably in ten years it will want another, and I don't know where it will go to. He mentions Wembley having temporary accommodation for its exhibition folk; if we have a permanent exhibition ground, we can also find a place for the people engaged on the work, without creating a new slum.

Mr. R. J. MITCHELL (Mayor of Plymouth): At Plymouth we are very interested in clearing away slum property, because it is a historic old town, and we have had to make many alterations there in the last few years, and we are doing very well in that respect. We have had much difficulty in getting the Council to accept three-storey flats, because they say two-storey buildings are sufficient. In Plymouth the question is, do we get in the Council houses the kind of tenant we want? I am afraid that in many instances the tenants are men who are earning a fairly good salary. Paying only ten to eleven shillings a week seems hardly fair for a man who is earning something like £300 a year. We want to get people out of the slum districts and bring them out into the fresh air. What we must try to do is to teach them when young how to run and manage a home; it can be done by general education and studies in domestic subjects. I also think we should encourage

private enterprise more. These Council houses cannot be put up at an economic rent.

Miss JEFFERY: I am only a visitor, but Mr. Duckworth has mentioned our work in the Octavia Hill organisation, and I would like to express our thanks to him for having done so. Those who have done anything in this way feel that our work is not the only solution of the slum problem. I have felt very keenly that it is absolutely necessary, if slums are to be prevented in the future, that the replanning of built-up areas shall take place, and I have devoted some of my spare time to doing what I can to forward that movement and arousing interest in London itself.

Mr. F. LEWIS: I also am a visitor, but may I enquire whether it would not be a solution, in congested areas in London, to put up an economical type of house—not the ideal house of the town-planner, but an economic house such as the Mayor of Plymouth suggested? I mean not too far away, so as to entail a railway journey to get to work. This would avoid the matter of subletting. In all these attempts made to clear slums, what happens is—and I speak with some authority, on experience overseas, including America—that you send three tenants into one domicile. What we want is private enterprise to step in and build places where we could house dispossessed people temporarily. In the interim you might destroy a spot of 60 houses to the acre and then put up houses 20 to the acre, not sending them too far out. Johannesburg failed with its housing scheme; they tried it for both the European and the coloured population, and they failed. It is difficult to differentiate as to colour between the native and the European. We placed them 12 miles outside the town, and we relied on the State for conveyance, which would give us facilities to a certain point. But a time came when the traffic got better returns, and then they side-tracked this temporary housing scheme. I have a letter from the architect, verified by the town engineer, which tells me that the 10,000 people whom we housed as a temporary measure at 12 miles distance from the town take 1½ hours to get to their work and the same time returning from it; and they have had to bring the people back to the very spot that we have cleared and which was known as the insanitary area. They have to bring them where they can get quick access by tram and bus, rather than go to the State-owned railway.

The PRESIDENT: We have had an extraordinarily interesting paper, and a deeply interesting discussion has followed it. I have much pleasure in putting the vote of thanks to you.

Carried by acclamation.

Mr. DUCKWORTH: I can only say—thank you very much indeed for having invited me to address you in the first place, and, in the second, for having listened so patiently to what I had to say.

# Sir John Vanbrugh

1664—1726

BY ARTHUR T. BOLTON [F.], F.S.A.

THE bicentenary of Sir John Vanbrugh has been so well recognised in the public Press, and illustrations of his work so freely given, that it does not seem necessary here to make more than a brief commentary on the more strictly architectural aspect of his life and work.

Recognition of his genius was started by Robert Adam, some years in advance of the well-known eulogy by Sir Joshua Reynolds in his Discourses at the R.A. The exact terms used by Adam are worthy of close attention. Sir Wm. Chambers must have read them with satisfaction, as confirmation of his estimate of his rival's general unsoundness of doctrine.

The average student of architecture, nurtured on *Civil Architecture* and the *Encyclopædia* of Gwilt, has had little use for Vanbrugh, and in a way his reactions to Blenheim and Castle Howard, when actually seen, may prove a fair criterion of his own growth in architectural appreciation. The faults and deficiencies of Vanbrugh are so easily seen. Castle Howard, sixteen miles from York, is less often visited than Blenheim, so close to Oxford. The drawings in *Vitruvius Britannicus* hardly prepare the student for the amazingly picturesque quality of the Yorkshire Palace, more particularly on the entrance side. The distant masses of the further wings are an essential element, that is hardly realised on paper. Disraeli's appreciation of the house was a genuine tribute. Blenheim is deliberately a monument, but the idea that it is uninhabitable arises from a misconception. Robert Adam meets this point, when he puts Vanbrugh above Inigo Jones, as understanding better "the manner of living amongst the great." Blenheim, in fact, with its corridors, internal courts for light, and combination of large state-rooms with smaller apartments for actual use, is, in point of plan, far in advance of its time. The Press has seized on the "amateur" aspect of Vanbrugh, and his apparently sudden incursion into architecture, oblivious that when Swift wrote,

"Van's genius, without thought or lecture,  
Is hugely turned to architecture,"

he was delighting in a rhyme for a very awkward word. Palladio, during a prison confinement in Paris, would be a very adequate text book, not to mention the cultivated society that visited him in the Bastille.

Those who have been caught abroad in times of political tension know how fateful are the rods, tapes, and above all the inquisitive habits, of the student of architecture. Vanbrugh was lucky to be released as soon as he was. No doubt in Paris he admired the "College of

Nations," opposite the Louvre, as much as Wren had done on his earlier visit. Returning to London he must have been sympathetically received by Wren, and it is practically certain that, without his concurrence and the draughtsmanship of Hawksmoor, Vanbrugh would have been unable to deliver the goods, either at Castle Howard or Blenheim. The leisurely method of building by measure was also in his favour. He had at hand in Wren's office a staff that could supply all that he himself lacked for his first essays in architecture. He was too little broken in to settle down to serious drawing. Dashing sketches, and a hastily roughed-out half-elevation, to be redrawn and put in by others, was his method, but it was preceded by that acute visualisation of the design, as a whole outstanding and completed mass, which marked the real architect.

Hawksmoor never afterwards escaped from his influence, and oscillated between the mass of Vanbrugh and the grace of Wren, seldom succeeding in any adequate fusion of the contrasting elements.

Vanbrugh's originality was, in part, a perception of the unity of building. He certainly looked at what was known as "Gothic" in much the same way as Robert Adam, that is, as composition in terms of light, shade and grouping. Some years ago a writer, giving an account of English architects in a French paper, compared Vanbrugh to Charles Garnier, provided the latter was deprived of all his school-acquired technique. Vanbrugh in fact never understood detail. At the Coliseum the Roman architect, to save time and labour, chopped out the bases of the upper orders to a 45° level. Vanbrugh goes one better in a drawing, and blocks out caps and bases alike in this naive fashion. In the third volume of the Wren Society will be given a St. Paul's drawing where the western tower, above the carefully drawn nave, is blocked in with a brush. If this is not an actual friendly suggestion by Vanbrugh, it is the most complete thing in his manner that can be imagined. After all, there is a complete parallel in the case of orators. In the late eighteenth century auditors of Edmund Burke could hardly support the amazing occasional crudity of his language and similes. "Rare gems that needed polish" was Robert Adam's apt reference to this aspect of Vanbrugh's work.

One of the singularities of his design is the insistence on circular heads to his windows, nearly always in two tiers. It may be assumed that some constructive instinct led to this preference of his over the more manageable lintel for domestic work.

Another mannerism is the use of the lunette in the



tympans of pediments, as in the Clarendon Press, and at Compton Verney. His large scale is more easily understood; greater Continental experience would go far to explain it, but his freedom from any pedantry in the use of the orders is his own. With him they were merely a means to an end, and probably he had not the remotest conception of the Greek idea of an essential beauty, acquired by a process of logical refinement. To Nash "an Ionic was an Ionic, and he did not care which example his assistant used," and it is probable that Vanbrugh's idea was nearly as crude, only he was more apt to dash out an ornament, or terminal, with a brush, and leave the tradesmen to convert it into terms of actual building—that is at least the impression produced by the "shaving brushes of Blenheim."

It is very good for the student brought up on Chambers, a master who could not pass St. Paul's without regretting the absence of any diminution in the pilasters of the exterior, to come in contact with the massive nonchalance of Vanbrugh. He might do worse than mentally recompose the conception of Somerset House in terms of the earlier master. Sir John Soane, for all his academic study, had an eye for Vanbrugh's dispositions. When called upon for an official report for a Palace for the Duke of Wellington after Waterloo, he takes Blenheim as an example, and his Royal Palace design of 1821 recalls the outline plan of the main blocks of that example. Thanks to the Duchess Sarah it is more difficult to form an impression

of Vanbrugh as an architect of interiors. The dome vestibule of Castle Howard, however, is fine, and in both instances he shows a true perception of the superior claim of the hall over the staircase.

The great library at Blenheim is a magnificent room, but one is left in doubt as to his authorship of the detail. There is an uncomfortable feeling that no furniture could be large enough to be in scale. Probably his later work was more relevant to domestic usage.

Of work ascribed to him at Stowe, the Temple of Venus is a fine composition, but it is sometimes attributed to Wm. Kent, who may have revised and executed the design. There is, in fact, a singular absence of really accurate knowledge of his works. He was constantly aided by local architects, as by Coleman at Kimbolton, and his indifference in matters of detail would render him dependent on such assistance. John James of Greenwich, Archer, and, no doubt, other very competent architects, were at hand, when Hawksmoor was no longer available. There is nothing in this, however, to detract from Vanbrugh's essentially dominating influence.

Vanbrugh, despite all critics, remains a great personality. He added something essential to the preceding tradition. No doubt Palladio in his Miega and Thiene designs opened up the road, but Vanbrugh added to it a definite element, which is perhaps best described as romantic. He reasserted the "poetry of architecture."





THE BRIDGE OVER THE LOIRE AT BLOIS. From a Drawing by S. Chamberlain

## Old Bridges of France

BY HENRY M. FLETCHER [F.].

**P**ONTIFEX MAXIMUS—chief bridge-builder ! The most august title in Western Christendom tells of the veneration of pre-Christian Rome for this ancient mystery. The mediæval world showed the same feeling in a contrasted mood, by attributing the design of its more daring bridges to the Devil, and the vindictiveness of the majority in the London County Council towards Waterloo Bridge may be charitably explained as dread of magic. The children's game of

"London Bridge is broken down"

after proposing and rejecting various materials with which it might be built up again, ends with the seemingly irrelevant verse

"Here comes a poor prisoner,  
Let's cut off his head";

but cunning folklorists have traced in this infantile jingle a survival into the twentieth century of the rite of human sacrifice by which primitive bridge-builders sought to appease hostile demons and to weave magic into the structure. But there is in truth no need of gruesome ceremonial; the magic steals unbidden into every bridge, and few men are so pressed for time or so insensitive that they will not loiter a little, as they cross, to watch the bubbles on the water, the fish, the boats that pass beneath, or turn aside to the river's edge and pore upon the arches, filled with shadows and reflected lights, the dignity of their march from bank to bank and their steadfastness in contrast with the

hurrying water. The divorce of engineering and architecture has been disastrous in many ways, in none more than in bridge-building. Our architects have concerned themselves too little with structure, our engineers not at all with appearance. Waterloo Bridge is a success because it was the culmination of a long tradition, developed through the seventeenth and eighteenth centuries, of masonry bridges. Take the old bridges at Henley, Richmond, Maidenhead, Shrewsbury, General Wade's bridge at Chollerford, the original bridges of Blackfriars and Westminster, and you see the genesis of Waterloo Bridge. Those who say "Surely we have engineers who can give us a bridge that will vie with Waterloo Bridge in beauty and yet fulfil present-day requirements" either do not use their eyes or do not know what they are talking about. The requisite tradition does not exist. Or do they expect a fine bridge on the grand scale to be evolved from the study of Charing Cross and Blackfriars, of Hammersmith and the Tower?

In the beautiful book\* which they have presented to our Library, Professor Emerson and Monsieur Gromort, old pupils of Laloux, have collaborated to place on record many of the fine bridges to be found in every part of France. The book is worthy of the subject, and it is impossible to say more. The period

\* *Old Bridges of France*. By William Emerson and Georges Gromort. Published by the Press of the American Institute of Architects, New York.



dealt with extends from Roman days to the end of the eighteenth century, from the Pont du Gard, built probably in the reign of Augustus, to the Pont de la Concorde, under construction while the guillotine was at work in the adjoining Place.

The book is evidently the result of long and extensive travel and careful research. Most parts of France have been visited, a task which cannot be carried out in a hurry, and the amount of historical information

style and direct statement. The colour is pure and clean, and the brushwork, for all its apparent freedom, never interferes with the precision of the drawing. In spite of the simplification of detail, comparison with the measured drawings proves that nothing essential is scamped or slurred over. The colour reproductions, by Daniel Jacomet and Co., of Paris, are of such excellence that except by touch they are hard to distinguish from original work. Where all are so fine it is



THE BRIDGE AT LAVAUR. By Pierre Vignal

which has been brought together must represent years of work. In form, the volume is of very great beauty. Paper and type are admirable—the many process reproductions, to the delight of the discriminating reader, are printed on paper, instead of on clay, and there is a valuable two-page diagram, showing in outline all the bridges described, and a few more besides, drawn to the same scale. But it is the illustrations which give such distinction to the book. There are twenty-four water-colours by the late Pierre Vignal, which are a model of bold and dashing

difficult to choose, but we may call attention especially to the Pont du Gard, sombre and majestic under a cloudy sky, the Roman bridge at Saint Chamas, with its two little triumphal arches shimmering with heat in the dust of Provence, and, best of all, the near view of the Pont Marie at Paris, a masterpiece of composition and harmonious colour, with its three grey cutwaters stemming the green swirls of the Seine.

As if this were not enough, we have thirty-four pencil sketches by S. Chamberlain and Louis C. Rosenberg, whose delicacy, sensitiveness and economy

of line is as remarkable in its way as the freedom and breadth of the water-colours. Indeed, Monsieur Laloux, who writes an introduction, and who must be hardened to all the usual merits of architectural drawing, can only describe them, with Dominie Sampson, as *prodigieux*.

Lastly, there are forty-four sheets of measured drawings. We are not told precisely to whom these are due, but internal evidence makes it fairly certain

wrought by differences in the elements of a bridge—arch or arches, piers, two abutments and a parapet. From the mighty arch at Lavaur, 75 feet high and 160 feet wide, and the fortress-bridge at Cahors, with eight arches and three towers—surely the noblest mediæval bridge in Europe—to such scholarly trifles as the canal-bridge at Toulouse and the bridge of the Beautiful Fountains at Juvisy, every type of bridge is represented that was known before the days of steel



THE BRIDGE AND THE CITY OF CARCASSONE. By Pierre Vignal

that they come from the Ecole des Beaux-Arts. The style of draughtsmanship is French. So is the pleasingly cavalier treatment of English orthography; "Section trough AB" occurs several times, "Archs" enlivens Plate v, and "Nich" Plate xxii.

They are models of accuracy and beauty, and should serve to guard some generations of our own students from the thick-line plague, and to show them how much feeling can be expressed within the limits of geometrical draughtsmanship.

Turning from the illustrations to the subject-matter of the book, one admires the variety that can be

and concrete. It is interesting to note the persistence of certain methods due to the Romans, and especially that of piercing the upper parts of piers or spandrel with subsidiary arches or with circular or oval holes. The object was no doubt partly to lighten weight and economise masonry, partly to allow passage for flood waters. It is to be seen in all the Roman bridges illustrated; in the Middle Ages in the huge arch at Cér on the Spanish border, which the authors suggest was a copy of a previous Roman bridge—it certainly does not look mediæval—and in the Pont d'Avignon; in the early seventeenth century at Toulouse, and again an



gain in all the later work. We learn with surprise that the first use in France of a balustraded parapet was in the Pont de la Concorde, designed in 1772, and that it was there used not for its own sake but to harmonize with Gabriel's treatment of the Place. The bridge of Clare College, Cambridge, was finished in 1640, and that of St. John's College in 1712, and it is unlikely that so natural a treatment was unknown or did not suggest itself to French architects. One can

of its function and so rich in light and shade as to be one of the most impressive of human structures, and whatever is added beyond its primary need is in most cases a mere distraction and weakening of effect. A special character is given by the cutwaters, which clearly distinguish a bridge from a viaduct, an aqueduct or any other series of arches not subject to the pressure of running water on their bases. They are sometimes confined to the up-stream side, but are more generally



THE BRIDGE AT ORTHEZ. By Pierre Vignal

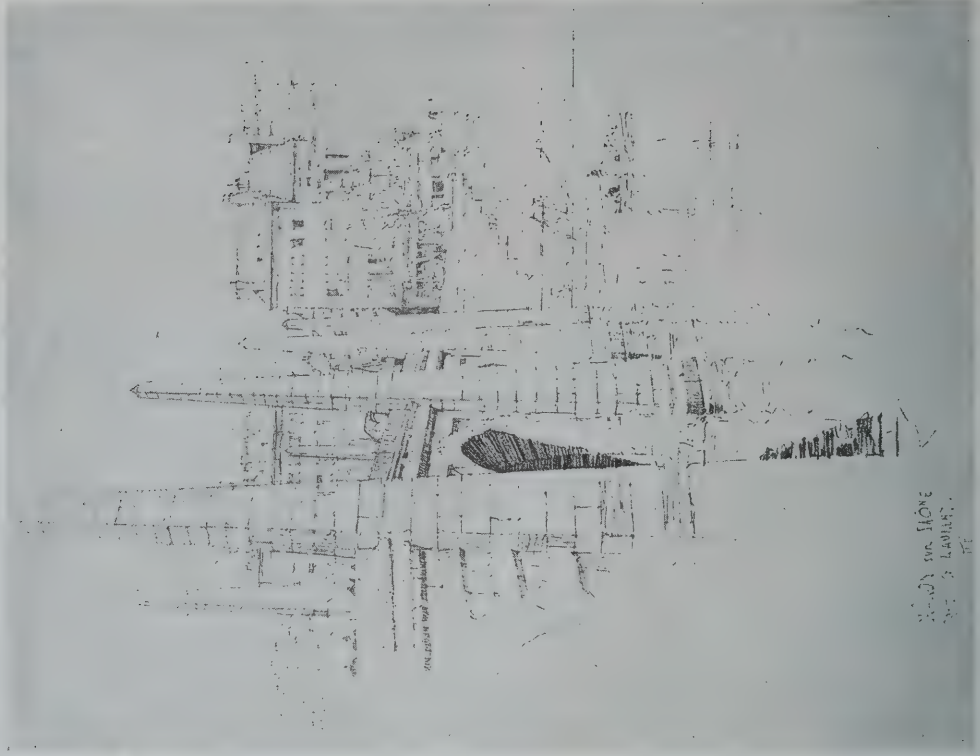
ly guess that they deliberately rejected it as too voluous a finish for such a monumental structure as a ridge. It undoubtedly reduces the apparent weight of the crown of the arch, and in the Pont de la Concorde, which like Perronet's other bridges suffers from excessive thinness at that point, the gain is unquestionable.

Ornament, after all, adds little beauty or significance to a bridge. A succession of arches, whether monumentally similar, as in Waterloo Bridge, or varying in span and height under a curving roadway, as in the majority of mediæval bridges, is so clearly expressive

added down-stream as well, to prevent the formation of back eddies which may undermine the piers. In the Pont Valentré at Cahors the acutely-pointed cutwaters are carried up 57 feet sheer without a moulding or a change of plane from water to parapet, where they form refuge recesses for foot passengers. Nothing could be nobler or more reasonable, nor could there be a more cogent argument in favour of directness in bridge design. As an interesting contrast, we have the bridge of St. Laurent at Châlon-sur-Saône, begun by the engineer Gauthey in 1776. Here the cutwaters start tapering as soon as they leave the water; the



CAHORS. PONT VALENTRE (XIVth Century)  
From a drawing by S. Chambellain



CHÂLON-SUR-SAÔNE. PONT ST. LAURENT  
From a drawing by L. C. Rosenberg



arapet is 37 feet up, and they are carried yet another 2 feet higher to form four pairs of obelisks! An ingenious conceit, but one that would grow tedious with repetition, and you feel that the man who devised it was at least as intent on expressing his personality as on building a bridge. Not that Gauthey is by any

low bank to a high, and, like the old builders of the Elvet bridge at Durham, he faced it in the most direct manner, with a continuous gradient and progressively increasing arches. Note the refinement of curves in the planning of piers and abutments, designed to guide the flow of the stream along the lines of least resistance,

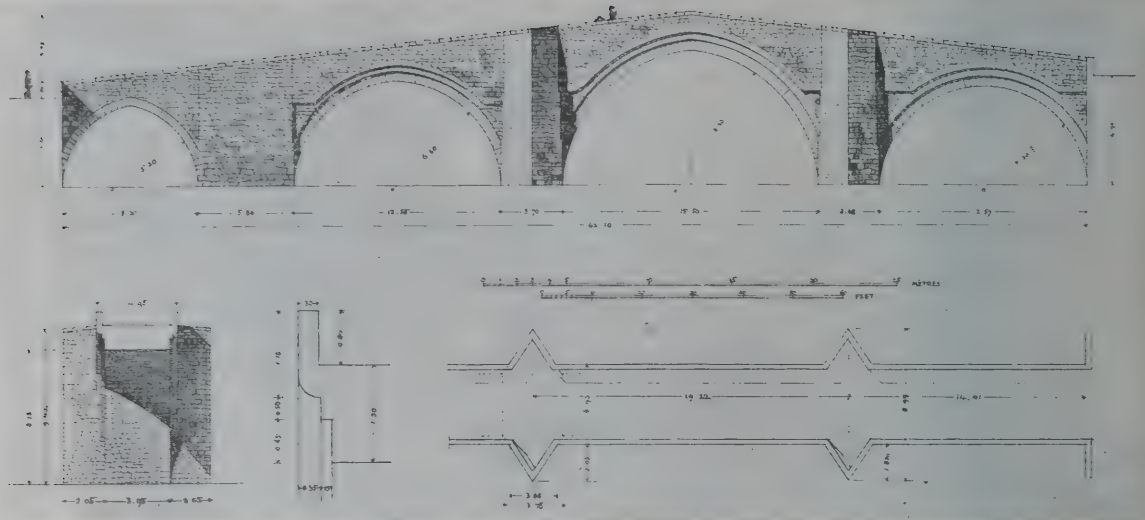


THE BRIDGE AT AIRVAULT. From a drawing by Louis C. Rosenberg

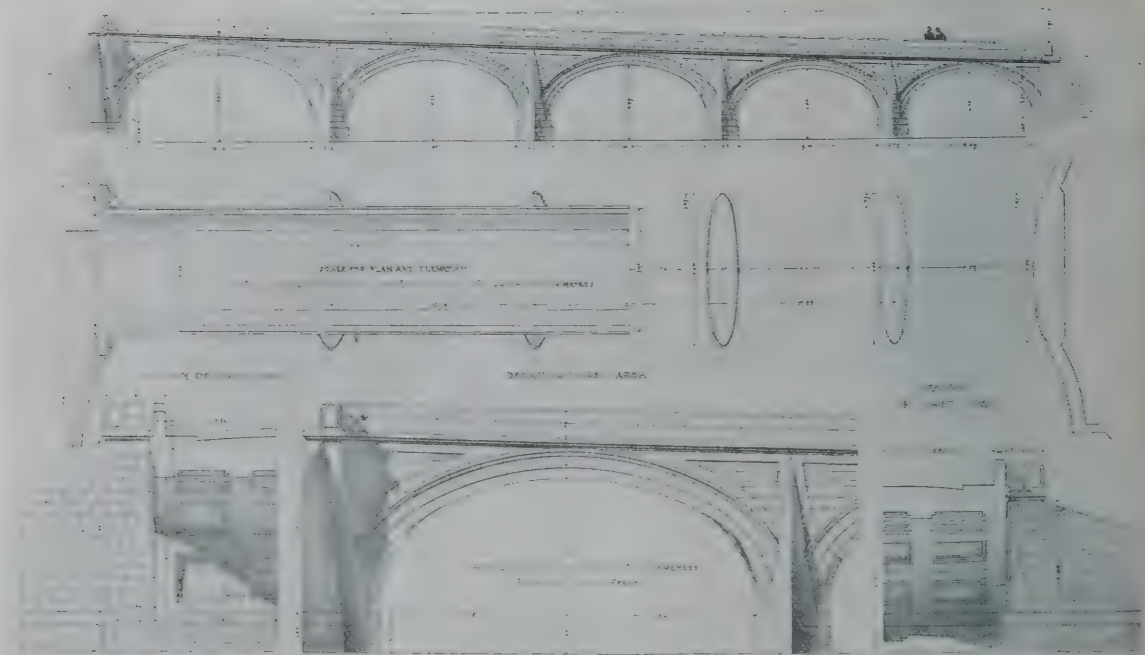
ans negligible as a bridge-builder; four of his signs are given in this collection, and one of these, at Meungon on the Arroux, is on all counts the most interesting of the eighteenth-century bridges illustrated. In the rest his scholarship is apt to "stick" in the shape of urns, Greek frets, obelisks and other trimmings; in this it is set to the task of refining and shaping the essential parts of the bridge. The problem was the uncommon one of rising from a

and how these curves are carried up to die away imperceptibly in the soffits of the arches. The delicate problems of stereotomy involved, differing in every arch according to its size, are tackled with no apparent effort. Little wonder that the illustrators shrank from such a ticklish subject; a photograph would have been interesting, to show how much or how little these refinements tell in execution.

The longer one studies the great body of work



ESPALION, AVEYRON. BRIDGE ON THE LOT (XIth Century)



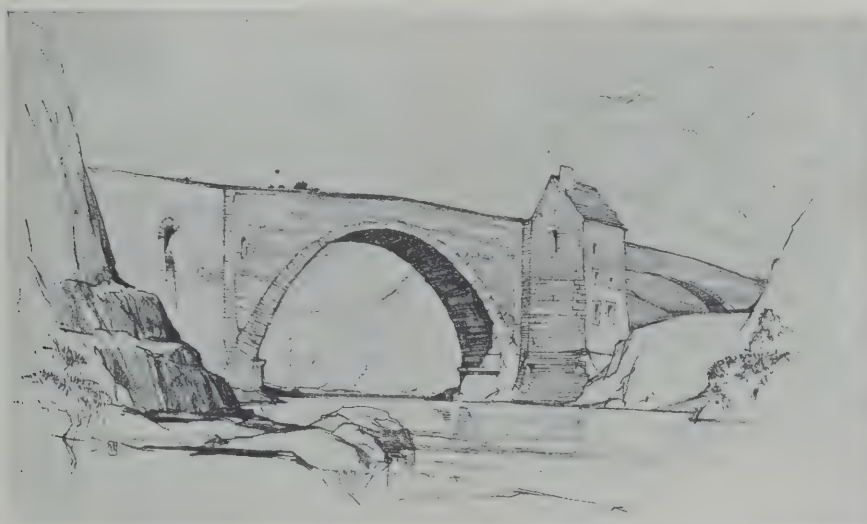
GUEUGNON, SAÔNE-ET-LOIRE. BRIDGE ON THE ARROUX (XVIIIth Century)



rought together within the covers of this book, the more clearly it appears that the best, the most beautiful and the most striking bridges are those designed by men so intent upon building the best possible bridge that they had no time or strength left for gestures, or for whispering, even to themselves, a hint of their own cleverness in bridge-design. Wherever such whispers are heard—and they are heard more than once towards the end of the volume—the design suffers. It must be admitted, too, that by the end of the eighteenth century Perronet had allowed science to master rather than to serve him, and in his bridges at St. Dié, Pont Ste. Maxence and in Paris had widened and flattened his arches and thinned their crowns to a point where stone masonry ceases to appear stable; one

feels that if more was demanded in this direction it was time to turn to other materials.

The book gives rise to another thought—that what has been done for France should surely be done for England, even if on a less sumptuous scale. There is plenty of material, but alas, it diminishes daily! Every year sees some fine bridge destroyed on account of the increase in volume and speed of our road traffic, and there is none too much time for recording by measurement, photograph and sketch those that are left. Will not our Allied Societies combine to form such a record, each in its own district? The standard has been set for them by Messrs. Emerson and Gromort; let them beat it if they can.



BRIDGE OF CLAIK. Built 1608-1611. From a drawing by L. C. Rosenberg

# The Development of London and the Home Counties

## THE NEED FOR A COMPREHENSIVE PLAN.

By H. V. LANCHESTER [F.].

Resulting from the presentation to the Prime Minister of a Memorandum on this subject, the following representative deputation attended before the Rt. Hon. Neville Chamberlain, M.P., Minister of Health, on Tuesday, March 23rd, 1926.

<i>Society.</i>	<i>Representative.</i>
Town Planning Institute ..	Professor Patrick Abercrombie.
Town Planning Institute ..	Mr. Thomas Adams.
Town Planning Institute ..	Mr. E. R. Abbott.
Institute of Transport ..	Mr. W. H. Gaunt.
Garden Cities and Town Planning Association	Mr. Ewart G. Culpin.
Institution of Municipal and County Engineers	Mr. Edward Willis.
The London Society .. ..	Capt. G. S. C. Swinton.
The London Society .. ..	Mr. Maurice E. Webb.
The London Society .. ..	Mr. Arthur Crow.
Metropolitan Public Gardens Association	The Earl of Meath.
Metropolitan Public Gardens Association.	Mr. H. T. Tozer.
Royal Institute of British Architects.	Mr. H. V. Lanchester.
R.I.B.A. and Roads Improvement Association.	Mr. W. R. Davidge.
Roads Improvement Association.	Major R. A. B. Smith.
Commons and Footpaths Preservation Society.	Sir Edgar Bonham Carter.
Commons and Footpaths Preservation Society.	Mr. L. W. Chubb.
London Playing Fields Society	Mr. F. R. Bush.
National Housing and Town Planning Council.	Major C. P. Lovelock.
National Playing Fields Association.	Sir Arthur Crosfield, Bt.
National Playing Fields Association.	Lieut.-Col. K. Vaughan Morgan, M.P.
Secretary .. ..	Mr. Alfred R. Potter.

The speakers were introduced by Professor Abercrombie, who drew the Minister's attention to the number of societies represented and the variety of aspects from which these looked at the problem of London's expansion. He emphasised the view that present conditions demanded the study of a wide area. Mr. Thomas Adams, who followed, referred to the degree of success achieved by Joint Town Planning Committees, and to his work at New York, which he thought presented more difficulties than might be expected in the case of London. Alderman Culpin mentioned that 2,000 acres were required for the normal annual increase in population and

claimed it as desirable that this should be provided for in Garden Cities or Satellite Towns. Mr. W. R. Davidge, on behalf of the R.I.B.A., said that this body would be glad to help forward the preparation of a Regional plan, and mentioned that the scheme of arterial roads, considered visionary in 1913, had been in a large measure actually carried out. Mr. Lawrence Chubb dealt with the serious shortage in playing fields and playgrounds, mentioning that the L.C.C. could not meet half the applications it received. Small open spaces and squares, also, were being lost in redevelopment. There was a shortage of 15,000 acres, and the pressing need was for powers to purchase cheap land where it could be secured in advance of building development.

The Minister, in reply, said that as the procedure advocated by the deputation was a conference of all the local authorities concerned, he should like first to be assured that this would lead to the end aimed at, namely an ordered scheme for development. Such a scheme, however sound, must affect districts unequally, and each striving to protect its own interests the result would be hindrance rather than help for such a colossal plan. While he himself was convinced of the advantages of such a scheme, it was quite another matter to persuade the local authorities whose willing assent was necessary to success. He would see whether a conference could be convened, but matters of policy were involved which would have to be investigated first. He added that he was strongly in sympathy with any movement for securing open spaces in advance of development. These would not be thrown away whatever plans were finally adopted.

In thanking the Minister for his reply, Professor Abercrombie said that the various bodies had many ideas as to the ways and means of preparing such a plan which they would put forward in a memorandum.

NOTE.—It will be seen that while Mr. Neville Chamberlain was in complete sympathy with the view of the deputation—telling them, in fact, that they were preaching to the converted—he could not visualise a vast number of local bodies, some of them small rural councils, taking an equally advanced view, and could look for no serious action as likely to arise from a general conference—certainly not for any enthusiasm in contributing to such a fund as would be needed to prepare a scheme on so large a scale. Of course it was not possible for him to hint at imposing a plan provided by any superior authority, a course too foreign to the traditions of our system of local government.



ment; but in some way the impression on the deputation's mind was that nothing short of this would bring about any speedy solution of the problem. Possibly the only hope for Greater London is a reconstruction

of its mode of government on more logical lines. As things are at present the more vital interests of the majority of the controlling bodies within the area have but little relation to its development as a whole.

## Devonshire House Buildings

BY CHARLES MARRIOTT

For the layman, at any rate, one effect of the visit to the new buildings on the Devonshire House site on Saturday, 20 March, was to clear up any uncertainty in his mind as to whether the details of construction in architecture ought or ought not to be expressed in the elevations. In the light of the new Piccadilly Building, designed by Messrs. Carrere and Hastings, of New York, and Professor C. H. Reilly, the answer seems clear enough: it depends upon the kind of construction. The expression is an artistic virtue exactly so long as it happens as a natural consequence of the method of building. When the method is so radically altered that it ceases to be building as our forefathers understood the word the artistic virtue is to say so; and is because the Piccadilly Building says so more plainly than we have been used to that it strikes the layman as a fine piece of contemporary architecture. As nearly as may be the whole of the stone facing proclaims itself to be a protective and decorative "skin," bearing pretty much the same relation to the steel framework as the planking or plating to the ribs of a ship.

This, one cannot help feeling, is a great step gained. His remarks to the visitors, and in part explanation of the extraordinary rapidity of its erection, Professor Reilly said that the building had been not so much "built" as "assembled." He said it with some appearance of regret. But why? Surely the time has come when we should take hold of machine production and construction with both hands, and design accordingly. One could have said that what was the matter with a good many recent buildings was that they pretended to be built when they were in fact assembled. The Piccadilly Building looks like the kind of labour that produced it, in which there can be no higher tribute to any work of art. It looks like it so frankly as to raise in acute form a minor question of ornament. The ornament on the Piccadilly Building is charming in itself; a chasing engraving of the surface at the right intervals with little pretence, even in the Ionic capitals, of a structural function as a trellised "creeper" on a wall; but it does help to confirm the belief that Renaissance ornament presupposes mechanical production—from good design, understood. Minor variations which are in Gothic are a positive defect in it. The comparison that comes to mind is that of the written page and the printed page. Each lends itself equally to

"design," in spacing, balance and proportion; but the irregularities which charm in the one are a nuisance in the other. Once put your money on precise regularity and exact repetition and the machine is the logical answer; and the next step for architects in "assembled" buildings is surface decoration by mechanical means.

But the Piccadilly Building, though it raises this question, does not rest upon its decoration. It rests upon the admirable proportions of the blocks of which it is composed and the logical rightness of their articulations in one commanding mass. No recent building that one can think of supports more strongly Mr. Manning Robertson's contention—in *Laymen and the New Architecture*—that the type of the modern great building is the Tibetan monastery. The disposition of the windows, satisfying the eye with the proportion of voids and solids, proclaims the nature of the interior accommodation. You see that, just as the stone "skin" is independent of deeper structure, so the internal economy can be adjusted without affecting the splendid proportions of the whole. Apart from all its other merits the Piccadilly Building leaves the exciting impression of having cleared the ground of past confusions in methods of building and pointed the way to the developments of the future.

Possibly because it is further advanced it is the interior of the building for Messrs. Thomas Cook and Sons, designed by Mr. Arnold Mitchell, that makes the best impression. So far as the exterior is concerned it lines a thoroughfare simply and sensibly, though the treatment is somewhat heavy. Obviously, here, there was not the same opportunity of site as with the Piccadilly Building. Obviously, too, the real "meaning" of the building is inside: a place for comfort and expedition in business. From this point of view it is a triumphant success. Mr. Arnold Mitchell's remarks to the visitors made one see the building in progress, in orderly economy with severe application to purpose. Both in the great banking hall, covering half an acre, and in the various offices the impression is that of perfect lighting and freedom from distraction, and the composition of the whole from a simple unit of construction determined by the supports is a delight to the methodical mind.

## The Library

NOTES BY MEMBERS OF THE LITERATURE COMMITTEE ON  
RECENT ACQUISITIONS.

[These Notes are published without prejudice to a further and  
more detailed criticism.]

ITALIAN GARDENS OF THE RENAISSANCE. By J. C. Shepherd, A.R.I.B.A., and G. A. Jellicoe. London: Ernest Benn, Ltd. Folio, 26 pp. 92 plates. 1925. £5 5s. net.

This admirable work has been planned for the use of the architect rather than for the collector of picture books. Its aim is to give the reader a clear grasp of the idea behind the gardens described, rather than a series of pretty photographs of the details that adorn them. It is in this that it differs from some other works on the same subject that have preceded it, although it also has the additional justification of including many gardens that have not been adequately studied before.

The 57 gardens selected, which are chronologically arranged, have been carefully surveyed and illustrated by excellent plans and sections rendered in a very simple and beautiful style; there are many good photographs with the points from which they are taken marked on the plans, which is a very practical idea. The historical introduction and notes on the gardens are decorated with charming sketches. G. B. T.

BERTRAM GROSVENOR GOODHUE, Architect and Master of many Arts. The text by Hartley Burr Alexander, Ralph Adams Cram, George Ellery Hale, Lee Lawrie, C. Howard Walker and Charles Harris Whitaker. Published by the American Institute of Architects, Inc., New York City, 1925. £6 10s.

A sumptuous large folio volume containing a large number of illustrations from drawings in pen, pencil and water-colour, and photographs of this artist's delightful work, architecture, decoration, carving, sculpture, illumination, magazine covers and book plates, etc. L. A.

DIE SCHÖNE HAUSTÜRE AM NIEDERRHEIN UND IM BERGISCHEN LAND. With a preface by Prof. P. Klotzbach, B.D.A. Sm. fo. Elberfeld, 1925. £1.

A collection of photographs of a large number of entrance doorways from the Lower Rhineland, chiefly of the seventeenth and eighteenth centuries. The fanlights are, many of them, particularly charming. There is no text. A. H. M.

DALMATIENS ARCHITEKTUR UND PLASTIK. By Cirillo M. Ivekovic. Vols. VI.-VIII. Fo. Vienna [1926.] £6. [Anton Schroll and Co., Vienna.]

This book is the conclusion of a very exhaustive study of architecture in Dalmatia, profusely illustrated with photographs: a most interesting study showing the gradual development of Roman architecture at a distance from the centre. C. E. S.

MODERN THEATRES. By Irving Pichel.

In this book Mr. Pichel states the principles underlying the construction of an ideal stage and the relation of the auditorium to it, based on analyses of theatres that have been constructed to serve the needs of American "community centres" and "little theatre" groups as well as the large city with its commercial playhouse. It sketches briefly the historical traditions of theatre building and has chapters on stage plans, provision for backstage workers, stage equipment, lighting, machinery and stage fittings. There are many illustrations, ranging from the Teatro Farnese at Parma and the Elizabethan stage to the most modern theatres in America and other countries. C. C. V.

PICTURESQUE PALESTINE. By Karl Gröber. [John Rodd and Co., London, 1925.] 25s.

This book is the fourth volume of the Orbis Terrarum Series, and is devoted to Palestine, Arabia and Syria. The first 100 photographic reproductions illustrate Jerusalem, and the book contains altogether over 300 pictures. The photographs are well chosen and are beautifully reproduced. To turn the pages is a continual spur to the imagination, and gives a very full idea of the successive cultures and religious influences from the Roman and the Early Christian times as represented by their buildings.

It is not Herr Gröber's fault that so little remains of the ancient Hebrew buildings; one must still be content with descriptions from the Bible and Josephus to picture Jerusalem in all her glory, but this book will help to convey, to those who have not visited Palestine, the wealth of architectural beauty which exists. The letterpress, consisting of a dozen pages, of course, entirely inadequate, although within the narrow compass of 12 pages there is crowded as much information as possible. J. E. Y.

MASTERS OF ARCHITECTURE. Ange-Jacques Gabriel (1698-1782). By H. Bartle Cox. 80. London, 1925. 10s. 6d.

The name of Gabriel is rightly included in Messrs. Benn's series of Masters of Architecture, and this welcome work is illustrated by the usual well produced plates. The introduction insists more on the setting than the man; perhaps the author need not be quite so much afraid that the publication of this book will lead to a "style Gabriel" in Conduit Street. H. C. H.

ANCIENT COTSWOLD CHURCHES. By Ulric Dauber. 40. Cheltenham. 25s. [Ed. J. Burrow and Co. Cheltenham], 1921.

This is a book covering a field which is perhaps not very well known. It begins with a glossary and introduction. The district is divided and methodically described in the following eleven chapters.

The book is nicely illustrated with photographs and sketches and a few plans of the more important churches. C. S.

SOME EARLY AND LATER HOUSES OF PITY. J. M. Hobson, M.D., B.Sc. 80. Routledge, 10s. 6d.

Dr. Hobson's book is really a history of the Whitgift Hospital at Croydon, and of its younger sister, Trinity (or Abbot's) Hospital, at Guildford, but in tracing the origin of these pious Reformation foundations from the Leper Houses and Monastic institutions of the Middle Ages, he has allowed himself to inveigle into a survey, county by county, of similar houses in England. He has achieved his first object very well, but his second thoughts have produced work which is too sketchy to be of very much value.

The histories of the two hospitals that the author records, and the descriptions of their treasures, are admirable, and the details of the building of Whitgift Hospital, taken from letters written by the Rev. Samuel Fynch (who seemed to have been a kind of Parson-Clerk-of-Works) to Archbishop Whitgift and his Steward, are most interesting, and shed a flood of light on the building methods of the period. G. B. T.

ELEMENTARY GUIDE TO REINFORCED CONCRETE. By Albert Lakeman. 8vo. Lond. 1925. 2s. [Concrete Publications, Ltd.]

This is a useful little book for beginners, possibly for others, and contains much useful information. Clearly written and well illustrated. C. S.



THE FIRST INTERNATIONAL CONGRESS ON  
ARCHITECTURAL EDUCATION, 1924.

BOOK OF PROCEEDINGS.

Amongst the numerous letters expressing appreciation of the value of the work of the Educational Congress, the following has been received from Professor Emerson, of the Massachusetts Institute of Technology (Hon. Corr. M.):—

*Massachusetts Institute of Technology,  
Department of Architecture,  
491 Boylston Street, Boston.  
8 March 1926.*

DEAR MR. MACALISTER,—I wish to take an early opportunity to make my acknowledgments to the Royal Institute of British Architects for the care and thoroughness that went into the production of their proceedings of the International Congress on Architectural Education. The material itself as a matter of record is of the greatest interest and value; the comparative tables are most instructive and helpful; in fact, the entire volume contains much that may be of the greatest value to the schools of architecture in any country.

My memory of the many hospitalities and courtesies received at that time is still fresh and pleasant, and this reminder of those days and the chance to compare notes with fellow architects from other countries is most refreshing and stimulating.

Please express my thanks and appreciation to those whose efforts are responsible for this most satisfactory result.—Yours sincerely,

(Signed) WM. EMERSON.

## Correspondence

### THE WIDENING OF ROADS.

*The Arts Club,  
40 Dover Street,  
24 March 1926.*

The Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—While strolling along the country roads has often occurred to me that where the widening of these is found necessary it might be carried out in the following manner.

The whole of the roadway should be reserved for particular traffic, and new footpaths (frequently one way would be required) formed behind the existing hedges or fences, which would not need to be disturbed and which would screen the wayfarer from the sight of the passing traffic.

How pleasant if the trees and hedges which border roadsides, and which are so often ruthlessly cut down, could remain.

A great deal of labour in levelling, felling of trees and rooting hedges would be saved, and in many cases

a simple cinder footpath inside the hedges would suffice.

The cost of widening the roads in the way I suggest would be cheaper, and some natural beauties of the countryside happily would be preserved.

No doubt this idea is in the minds of our town and country planning experts, but as I have not seen it referred to I give it for what it is worth.—Yours faithfully.

FRANK W. SIMON [F.].

### JUBILEE OF THE ROYAL SANITARY INSTITUTE.

LONDON CONGRESS, 5 TO 10 JULY 1926.

Sir Henry Tanner, C.B. [F.], writes with regard to the forthcoming Jubilee of the Royal Sanitary Institute:—

"This year is the Jubilee of the Royal Sanitary Institute, it having been founded in the year following the passing of the Public Health Act of 1875 for the purpose of forwarding the objects arrived at in that Act and generally for the advancement of sanitary science.

"The Institute is a composite body, its membership including medical men, engineers, architects, municipal officers and others interested in its objects, and among those who took part in its foundation were many architects among whom were Sir Arthur Blomfield, Professor Hayter Lewis, Professor Roger Smith, etc., and we still have many architects as members. The profession is always represented on the Council. It is, however, regretted that architects are not coming forward in the numbers they formerly did to take part in the important work carried on by the Institute, and as Chairman of the Council the occasion of the Jubilee appeared to me to offer a good opportunity to appeal to members of the Institute to join us and help forward the work of sanitary science and hygiene.

"It may be urged that sanitary science as applied to buildings has become more or less standardised, and progress has been less marked in recent years; it is nevertheless important that the Royal Sanitary Institute should have the active support and co-operation of architects and surveyors in its work. Especially is this the case because the Institute becomes increasingly responsible, directly or indirectly, for the examination of candidates desirous of entering the Public Health Service, which deals largely with buildings and subjects allied thereto, and the consequent granting of certificates to those who pass the requisite standards."

A pamphlet has been issued which states the objects and work of the Institute to mark its Jubilee.

### WATERLOO BRIDGE.

The Editor wishes to correct a statement (given on the authority of *The Times*) in the JOURNAL of 20 March 1926, which he now finds to be misleading.

It was not the Royal Fine Art Commission who suggested to the Prime Minister that the future of Waterloo Bridge was a matter of national and not merely metropolitan interest, or that any action in the matter should be by way of a Parliamentary Bill.

### THE ROYAL GOLD MEDAL FOR ARCHITECTURE.

At a Special General Meeting of the Royal Institute of British Architects, on the 29th March, Professor Ragnar Ostberg (Honorary Corresponding Member of the R.I.B.A.), of Stockholm, was elected by the members and his name will be submitted to His Majesty the King as a fit recipient of the Royal Gold Medal for Architecture for the year 1926.

In the event of His Majesty graciously signifying his approval of the Award, the Medal will be presented to Professor Ragnar Ostberg at the Banquet of the R.I.B.A. on the 17th June.

The Medal was presented last year to Sir Giles Gilbert Scott, R.A., F.R.I.B.A.

### THE GARDEN CITIES AND TOWN PLANNING ASSOCIATION.

#### HOUSING AND TOWN PLANNING TOUR.

The spring tour of this Association will be a visit to the West of England, comprising the cities of Oxford, Bath, Bristol, Cardiff and South Wales. The tour will be personally conducted by arrangement with the Corporations of the cities concerned, and representatives of the cities will accompany the party on each series of visits.

The tour has been planned specially to meet the needs of members of local authorities, architects and social workers interested in housing and town planning reform as well as members of the Association, and it is suggested that local authorities might consider sending one or two of their members and officials with the party. The tour will last from 16 April to 23 April. Arrangements can be made for sections only of the tour to be taken, but it is hoped that members joining the party will do so for the whole tour.

Full particulars of the itinerary, cost, etc., can be obtained from the Secretary, Garden Cities and Town Planning Association, 3 Gray's Inn Place, London, W.C.1.

## Obituary

### JOHN WYNNE [F.] (*Retired*).

The death occurred on 15 March of Mr. John Wynne, who was in his 84th year.

Mr. Wynne was the son of the late Rev. John Wynne, of the Methodist New Connexion, and was educated at the Dudley Grammar School. He was articled to Messrs. Speakman and Charlesworth, architects, Manchester; afterwards for three and a half years he was principal assistant to the late Joseph S. Crowther, the eminent church architect.

Mr. Wynne commenced practice in Manchester in February 1871, and continued there until his retirement in 1915. He was elected Associate in 1875, and Fellow in 1878.

While in Manchester his work consisted of high-class shop and dwelling-house property, villas, chapels, warehouses, cold-air stores, stabling, etc. His knowledge of construction enabled him to undertake many difficult alterations. Mr. Wynne was a past member of the Moss-side (Manchester) District Council, where he was Chair-

man of the Sewage, Highways, and Health Committee and more recently of the Manchester City Council, where he did good work on the Baths, Rivers, Parks and Libraries Committees, etc.

He was Chairman of the South Manchester Library Association, and President of the South Manchester section of the Manchester and Salford Evangelical Free Church Council.

### NOTES FROM THE MINUTES OF COUNCIL

15 March 1926.

#### THE LAW OF ANCIENT LIGHTS AND EASEMENTS.

The Council approved the outline of a proposed Bill amending the law relating to the right to light by providing for the arbitration of claims, and to limit the acquirement of other easements, and authorised the representatives of the Practice Standing Committee of the R.I.B.A., in conjunction with the representatives of the Surveyors' Institution, to submit the proposals to the Law Society and discuss them with the latter body.

#### BYE-LAW 25.

The Privy Council have approved amendments to Bye-Law 25 by an Order dated 5 February 1926. The amendments relate to a procedure governing the suspension of a member.

#### SPECIAL ELECTION TO THE FELLOWSHIP.

Under the provisions of Bye-Law 12 the following architects were elected Fellows of the R.I.B.A. :—

Sir George Washington Browne, P.R.S.A. (Edinburgh).

Mr. Walter Hindes Godfrey, F.S.A. (London).

Mr. Harry Smith Fairhurst, A.R.I.B.A. (Manchester).

#### THE LATE MR. H. L. PATERSON.

The Council passed a special resolution of sympathy with the relatives of the late Mr. H. L. Paterson, President of the Sheffield, South Yorkshire and District Society of Architects and Surveyors, whose sudden death had deprived the Council of his valuable services and his much esteemed personality.

#### RETIRED FELLOWSHIP.

Mr. W. Lister Newcombe (elected Fellow 1880) was transferred to the Class of Retired Fellows.

#### RESIGNATIONS.

The resignations of Mr. Sydney Searle (Associate) and Mr. Arthur Davies (Licentiate) were accepted with regret.

#### STUDENTSHIP R.I.B.A.

The following Probationers were elected Students of the R.I.B.A. :—

Bostock, Robert, Sparshold Manor, near Winchester (Special Exemption granted by Schools Committee).

Bryce, William Theodore Percival, Farmfield, Penicuik, Midlothian, Glasgow School of Architecture.

Dark, Frank William, 45, Hornsey Rise, N.19, North London Polytechnic.

Dobie, William, Harrower Glen, Braehead, Oxtun, Birkenhead, University of Liverpool.

Kendall, Henry, 32, St. Stephen's Gardens, St. Margaret-on-Thames, University of London.



ubyuski, Norman Francis, Strathmore Avenue, Camps Bay, S. Africa, Intermediate Examination, Cape Town.

unders, Dyce Chalmers, The Architectural Association, 34, Bedford Square, W.C.1, Architectural Association.

mail, David Ian Hay, c/o Walgate and Elsworth, Hilliards Chambers, Church Square, Cape Town, Intermediate Examination, Cape Town.

atson, John, 7, Church Road, Giffnock, Renfrewshire, Scotland, Glasgow School of Architecture.

## CONFERENCE ON HOUSING AND TOWN PLANNING AT VIENNA.

An international town planning Conference will be held September this year at Vienna in accordance with the decisions taken at the Conferences at Amsterdam (1924) and New York (1925), and in response to the invitations of the Mayor and City Council of Vienna, supported by the Austrian Government and the Austrian housing and town-planning organisations.

The principal subjects for discussion will be :—

(A) Examination of the conditions of land tenure in each country and of how far they permit practical results respecting town and regional planning

(B) The rational distribution of cottage and tenement houses.

Vienna preserves much interest from the point of view of town planning and housing. It is the centre of an important region and has the status not only of a city but of state of the Austrian Republic. The city has had a zoning plan since 1893 and a general plan since 1894. It has a large belt of forest and meadow land amounting in all 11,000 acres. A new town planning scheme is being prepared for the large town area on the left bank of the Danube.

There will be exhibition dealing with the subjects to be discussed.

All correspondence should be addressed to the Organising Secretary, International Federation, etc., 3 Gray's Inn Lane, W.C.1.

## BOARD OF ARCHITECTURAL EDUCATION.

*R.I.B.A. Intermediate Examination, May 1926.*

The centres for this Examination will be London and Manchester. At both centres the Examination will be held from 28th May to 1st June 1926, inclusive. At the London centre the Oral Examination will be held on Thursday, 3rd June, and at the Manchester centre on Wednesday, 2nd June.

## R.I.B.A. PROBLEM IN DESIGN NO. XC.

A DESIGN FOR A CONCERT HALL.

The attention of students who intend to submit drawings in answer to Problem in Design No. XC, a Concert Hall, is drawn to the fact that they may, if they so desire, submit by the 30th October 1926, a sketch design for this subject for preliminary criticism.

# Notices

## THE TWELFTH GENERAL MEETING.

The Twelfth General Meeting (Ordinary) of the Session 1925-26 will be held on Monday, 19 April 1926, at 8 p.m., for the following purposes :—

To read the Minutes of the General Meeting (Business) held on Monday, 29 March 1926; formally to admit members attending for the first time since their election or transfer.

To read the following paper : "The Co-operation of Architect and Craftsman," by Mr. Gilbert Bayes and Mr. Laurence Turner, F.S.A.

## R.I.B.A. SESSIONAL PAPERS.

Members are requested to note that at the General Meeting on Monday, 17 May 1926, at 8 p.m., Mr. H. S. Goodhart-Rendel [F.], will read a paper on "The Work of the late Sir Thomas Graham Jackson, R.A."

## EXHIBITION OF GARDEN DESIGNS.

LECTURE BY MR. F. INIGO THOMAS.

The Exhibition of Garden Design (Drawings, Plans, Water Colours and Photographs) now being held in the R.I.B.A. Galleries, will be open daily from 10 a.m. to 7 p.m. (Saturday 5 p.m.) until Wednesday, 21 April 1926 (inclusive). In connection with the Exhibition, a lecture on "Gardens" will be given in the Galleries by Mr. F. Inigo Thomas on Wednesday, 14 April 1926, at 5 p.m.

## OLD BRIDGES OF FRANCE.

EXHIBITION OF DRAWINGS AT THE R.I.B.A.

Through the kindness of Professor Emerson (Hon. Corresponding Member) and Monsieur Gromort, authors of the recently published book on the Old Bridges of France, an exhibition will be held in the Institute Galleries of the originals of the illustrations of this book. Professor Emerson is lending the water-colours by the late Pierre Vignal, and a selection from the pencil sketches of Messrs. Rosenberg and Chamberlain, and of the measured drawings. Madame Vignal is lending a selection from her husband's water-colours of other subjects. The exhibition will be opened at 3 p.m. on Thursday, 22 April, and remain open daily between the hours of 10 a.m. and 7 p.m. (Saturdays 5 p.m.) until Saturday, 15 May.

## BRITISH ARCHITECTS' CONFERENCE.

LONDON, 1926.

The Annual Conference of British Architects will take place in London from 14 June to 19 June (inclusive).

All Members of the R.I.B.A., the Architectural Association, and the Allied Societies in Great Britain, Ireland, and Overseas are invited to take part in the Conference.

It is hoped that many ladies will be present, as guests of members, at all the events contained in the programme.

Members are particularly requested to make a note of the date (14 and 19 June), and to keep themselves free from other engagements.

A complete programme with full particulars will be issued in the near future to all the members of the bodies mentioned above.

## ROOMS FOR ARBITRATIONS, ETC.

Convenient rooms for arbitrations, etc., are now available for hire at No. 28 Bedford Square, W.C.1, at a fee of £2 2s. per day. All enquiries with regard to vacant dates, etc., should be addressed to Mr. C. McArthur Butler at that address.

## ADVERTISEMENTS IN THE R.I.B.A. JOURNAL.

The attention of all members of the R.I.B.A. is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. An increase in the income derived from such advertisements is a help to the financial position of the R.I.B.A. and an advantage to all its members. The circulation of the JOURNAL is world-wide, and going, as it does, to more than 6,000 architects in almost every part of the Empire, its potential value as an advertising medium is unequalled.

## THE INTERNATIONAL BUILDING TRADES' EXHIBITION.

It has been customary for many years past for the Secretary of the Institute to send an invitation to members to attend the biennial Building Exhibitions at Olympia. Through the kindness of the Director, Mr. H. Greville Montgomery (Hon. A.R.I.B.A.), each of these invitations has hitherto carried the sum of 1s. as a contribution to the Architects' Benevolent Society. For this year, Mr. Montgomery has kindly promised not only to give the 1s., but to double the amount raised. The Exhibition is open from 14 April to 28 April inclusive.

It is hoped that members of the Institute will use the tickets that have already been sent to them.

## A.B.S. SCHEME OF PROFESSIONAL INSURANCE.

Sickness insurance to be complete must ensure a provision in the event of a permanent breakdown in health. A temporary illness may be costly, but a permanent and protracted illness may have crippling effects.

The A.B.S. recommend to architects an attractive policy covering all sickness and all accidents, which cannot be discontinued by the company before the agreed age, provided the policy conditions are complied with. Disablement benefits are payable from the first day of incapacity and continue as long as disablement lasts.

Please address all enquiries to the Secretary A.B.S., 9 Conduit Street, W. Telephone, Mayfair 434.

## Competitions

## DOWNHAM MARKET U.D.C. HOUSING SCHEME COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

## PROPOSED NEW ELEMENTARY SCHOOLS, WARLEY, OLDBURY.

The Urban District Council of Oldbury, proposing erect new elementary schools, invite architects resident in the United Kingdom to submit designs for same in competition. Premiums of £200, £100 and £50 are offered. Assessor: Mr. W. S. Skinner [F.]. Designs to be sent by 21 May 1926. Conditions may be obtained from the Clerk of the Council, Council Offices, Oldbury, Worcester, by depositing £2 2s.

## COUNCIL OFFICES AND FIRE STATION: PURLEY.

The President of the Royal Institute of British Architects has nominated Mr. P. D. Hepworth, F.R.I.B.A., Assessor in this competition.

## PROPOSED ISOLATION HOSPITAL FOR INFECTIOUS DISEASES AT DONCASTER.

The Doncaster Town Council invite architects to submit designs in competition for the Isolation Hospital for Infectious Diseases, proposed to be erected on a site at Tickhill Road and Common Lane, Doncaster. Architects competing must be established in private practice. Assessor, Mr. T. R. Milburn [F.]. Last day for question 8 March 1926. Designs to be sent in not later than 10 May 1926. Premiums, £200, £100 and £75. Conditions may be obtained from the Town Clerk, Town Clerk's Office, Doncaster, by depositing £1 1s.

## SCHEME FOR BUILDING LARGE RESIDENCES: CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competition.

## MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knowles, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

## RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

## LEAGUE OF NATIONS.

COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will



open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

#### CHINGFORD COUNCIL OFFICES COMPETITION

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for Architectural competitions.

#### AUSTRALIAN NATIONAL WAR MEMORIAL AT VILLERS BRETONNEUX

The date for the submission of designs in the above competition has been further extended from 31 May to 1 July 1926.

#### SCOTTISH LEGAL LIFE ASSURANCE SOCIETY : NEW AND ENLARGED PREMISES.

The President of the Royal Institute of British Architects has nominated Mr. John Keppie, A.R.S.A., R.I.B.A., as Assessor in this competition.

## Members' Column

#### ASSISTANCE OFFERED.

LICENTIATE offers temporary assistance with the preparation of quantities or measuring-up, etc. London or South.—Apply Box 1936, c/o The Secretary, R.I.B.A., 9, Conduit Street, London, W.1.

#### MESSRS. AULDJO JAMIESON & ARNOTT.

The present partners, Ernest Auldjo Jamieson, F.R.I.B.A., and Messrs A. Arnott, F.R.I.B.A., who have carried on business as architects for the past fifteen years under the firm name of Sydney Mitchell & Wilson, have decided to carry on business under the firm name of Auldjo Jamieson & Arnott instead, from 29 March 1926. It is requested that all correspondence should be addressed after that date to Messrs. Auldjo Jamieson & Arnott, Architects, 13, Princes Street, Edinburgh.

#### DISSOLUTION OF PARTNERSHIP.

THE partnership between Mr. C. Murray Hennell, F.S.I., and Mr. C. H. James, A.R.I.B.A., has been dissolved. Mr. Hennell and Mr. James are practising separately at 15, Gower Street, London, W.C.1.

#### OFFICE ACCOMMODATION.

A FIRM of Architects in Manchester offers a share of a fully equipped suite of offices with clerical and telephone service. To a young, thoroughly qualified and ambitious Associate of the Institute, with some local interests, an opportunity is offered to build up a connection upon economical terms. While neither a salaried post, nor a partnership in any form is intended, a suitable man might reckon upon a limited amount of work being put in his way, with the possibility of a reversionary interest in an old-established practice.—Apply Box 2536, c/o The Secretary, R.I.B.A., 9, Conduit Street, London, W.1.

#### PARTNERSHIP WANTED.

ARCHITECT, A.R.I.B.A. Partnership wanted in London or near. Small capital available.—Reply Box 1122, c/o The Secretary, R.I.B.A., 9, Conduit Street, W.1.

#### ROOM TO LET.

F.R.I.B.A. has large room to let in Raymond Buildings, £85 per annum, including cleaning and lighting, share of telephone and assistant can be arranged.—Apply Box 2236, c/o The Secretary, R.I.B.A., 9, Conduit Street, London, W.1.

#### MR. BRIGHT FRASER [A.]

MR. BRIGHT FRASER (A) has been appointed Architect to the Shanghai Land Investment Co., Ltd., 28, Tinkee Road, Shanghai, China, and would be pleased to receive catalogues.

## Minutes XI

#### SESSION 1925-26.

At a Special General Meeting, held on Monday, 29 March 1926, at 8 p.m., Major Harry Barnes, Vice-President, in the chair. The attendance book was signed by 7 Fellows (including 5 members of the Council), 3 Associates (including 1 member of the Council) and 1 Licentiate.

The Minutes of the Special General Meeting held on Monday, 14 December 1925, having been published in the JOURNAL, were taken as read, confirmed and signed by the Chairman.

The Chairman announced the object of the meeting, viz. : to elect the Royal Gold Medallist for the current year.

On the motion of the Chairman, it was Resolved by acclamation that, subject to His Majesty's gracious sanction, the Royal Gold Medal for the promotion of Architecture be presented this year to

PROFESSOR RAGNAR OSTBERG (Hon. Corr. Member), of Stockholm,

in recognition of the merit of his work as an architect.

The Special General Meeting then terminated.

At the Eleventh General Meeting (Business) of the Session 1925-1926, held on Monday, 29 March 1926, immediately after the Special General Meeting above recorded, and similarly constituted, the Minutes of the Tenth General Meeting held on Monday, 15 March 1926, having been published in the JOURNAL, were taken as read, confirmed and signed by the Chairman.

The Hon. Secretary announced the decease of :

John Wynne, elected Associate 1875, Fellow 1878, and transferred to list of Retired Fellows in 1921, and it was Resolved that the regrets of the Institute for his loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to his relatives.

The following candidates were elected to membership by show of hands under By-law 10 :

## AS FELLOWS (10)

- LIVOCK : STANLEY GAGE [A. 1910].  
 MILBURN : STANLEY WAYMAN, M.C. [A. 1913], Sunderland.  
 MILBURN : WILLIAM, JUNR., B.Sc., F.S.I. [A. 1910], Sunderland.  
 MOORE : MAJOR FREDERICK WILLIAM, D.S.O., M.C. [A. 1912], Bradford.  
 PHILLIPS : REES [A. 1913].

*And the following Licentiates, who are qualified under Section IV, Clause C (ii) of the Supplemental Charter of 1925 :*

- BECKWITH : HENRY LANGTON, F.S.I., Liverpool.  
 CHADWICK : MAJOR JOHN, T.D., Bletchley.  
 FAUNCH : FREDERICK GEORGE, Ilford.  
 WADDINGTON : FREDERICK TURNER, Blackpool.  
 WALSH : JOSEPH FREDERICK, F.S.I., Halifax.

## AS ASSOCIATES (33)

- BLIZZARD : HENRY GEORGE [Special], Welwyn Garden City.  
 BROOKFIELD : GEORGE PIERS, B.Litt.Oxon., B.Sc. (in Architecture), of the Massachusetts Institute of Technology [Exempted from Final Examination], Paris.  
 BURTON : JOHN [Special], Stoke-on-Trent.  
 CASTELLINO : SYLVESTER JOSEPH TRINITY D'SOUZA [Special], Poona, India.  
 COOMBS : ROBERT EDWIN MONTAGUE [Final], Cardiff.  
 COOPER : WILLIAM REGINALD ROYDON [Special], Shrewsbury.  
 CURRIE : MURDOCH [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Glasgow.  
 DANN : CLIFFORD HORACE [Final], Norwich.  
 DOYLE : STANLEY HODGSON [Special], Leeds.  
 GRAY : CHARLES CLARE [Final], Walsall.  
 GREEN : CHRISTOPHER, B.A.Oxon. [Final].  
 GREEN : RALSTON TILSLEY [Final].  
 HARLEY : THOMAS [Final], Dunfermline.  
 KEMP : CECIL GEORGE [Special], Welwyn Garden City.  
 KIMBER : CHARLES FRANK, M.C. [Special], Colchester.  
 LIPSON : SAMUEL [Final], Glasgow.  
 MCKEWAN : ARTHUR MALCOLM [Final], Birmingham.  
 MESSENT : CLAUDE JOHN WILSON [Final], Norwich.  
 MOORE : JOHN ROBERT [Special].  
 PALMER : PHILIP EVANS. [Special].  
 PARAMOR : FRANK WILLIAM [Final].  
 PASHEN : JOHN HERBERT [Special], Weymouth.  
 PATKER : PURUSHOTTAM MUKUND [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Bombay, India.  
 POUSHKINE : BARBARA [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice].  
 ROWSE : ERIC ANTHONY AMBROSE [Special].  
 SIMPSON : DOUGLAS JAMES [Final], Bristol.  
 THOMAS : BRYAN WILLIAM RYLANDS [Passed five years' course at Cardiff Technical College. Exempted from Final Examination after passing Examination in Professional Practice], Cardiff.  
 VINE : RONALD OWEN [Final].  
 WATSON : EDWIN [Final], Birmingham.

WELSH : OLIVER MARTIN [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice].

WILDE : GEORGE [Final], Bolton.

WILFORD : CHARLES EDMUND [Special], Leicester.

WINTER : PERCY HAROLD, P.A.S.I. [Special].

## AS HON. ASSOCIATE (1)

BATSFORD : HARRY.

The proceedings closed and the meeting terminated at 8.15 p.m.

## NATIONAL HEALTH AND PENSIONS ASSURANCE

The Architects' and Surveyors' Approved Society,  
 26 Buckingham Gate, London, S.W.1.

## CONTRIBUTIONS.

The contribution for men is 1s. 6d. per week, 9d. of which payable by the employer, and for women 1s. 1d., 7d. of which is payable by the employer.

## ORDINARY BENEFITS (HEALTH INSURANCE).

*Sickness Benefit.*—Men, after 26 contributions have been paid, 9s. weekly; after 104 contributions have been paid, 15s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly; after 104 contributions have been paid, 12s. weekly.

*Disablement Benefit.*—Men and women, 7s. 6d. per week after 104 contributions have been paid.

*Maternity Benefit.*—40s. after 42 contributions have been paid.

## ADDITIONAL BENEFITS (HEALTH INSURANCE).

The recent valuation of the Society's assets having shown largely increased surplus, the following scheme of additional benefits was brought into operation from 6 July 1925 :

*Sickness Benefit.*—Payable at the increased rates of 22s. per week for men, and 19s. for women.

*Disablement Benefit.*—Increased to 11s. per week for both men and women.

*Maternity Benefit.*—Increased to 54s.

*Special Benefits.*—Grants made to members entitled to "additional benefits" for the full or part cost of optical, dental, hospital, nursing home or convalescent treatment, also for glasses, surgical appliances, artificial teeth, etc. Members may choose their own dentists, opticians or institutions.

Forms of application for membership, also pamphlet detailing the benefits under the new Pensions Act, may be obtained from the undersigned.

HERBERT M. ADAMSON, *Secretary.*

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to the method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their author and not as representative expression of the Institute.

## R.I.B.A. JOURNAL.

*Dates of Publication.*—1926 : 10th, 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

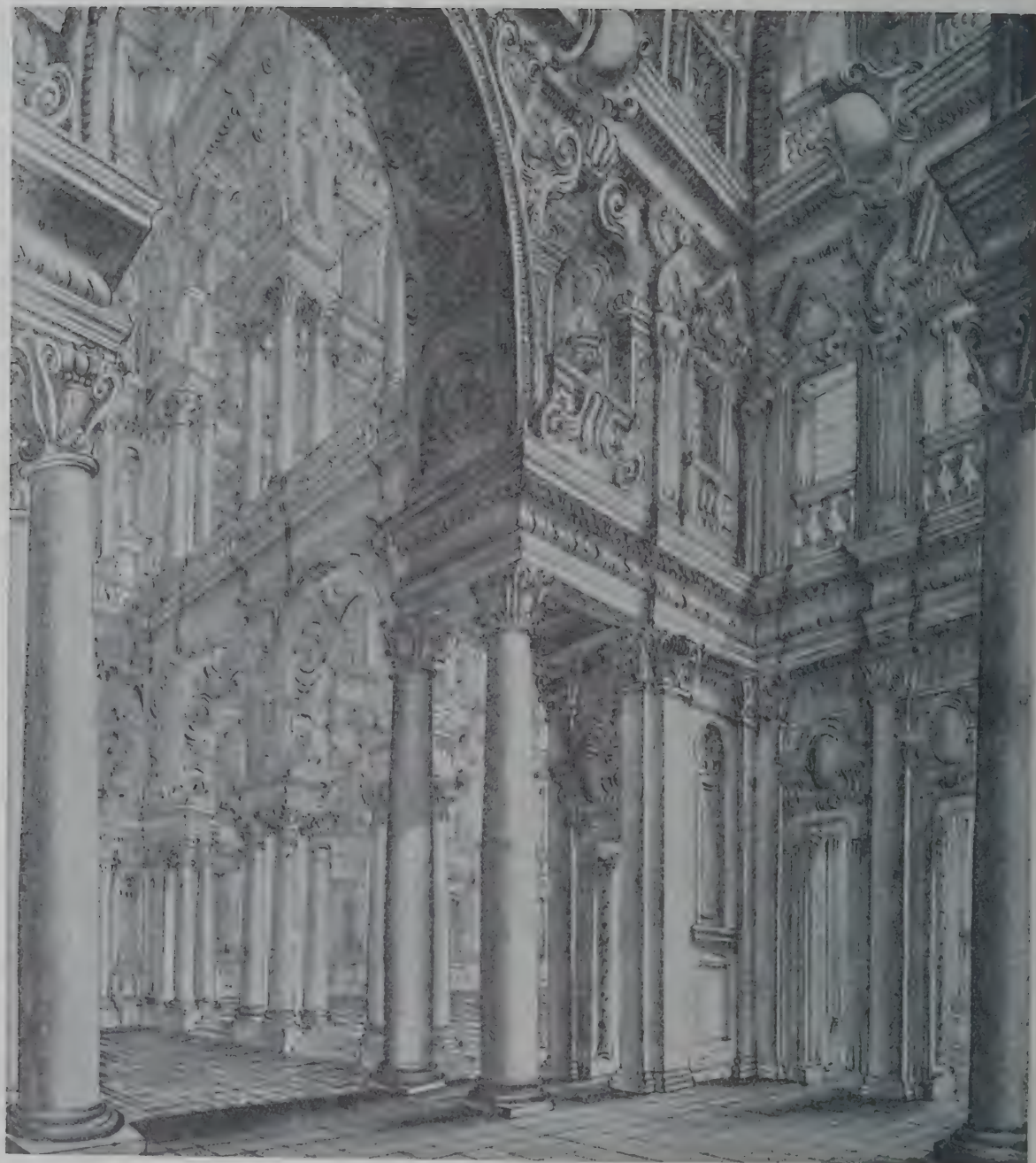
VOL. XXXIII. No. 12

THIRD SERIES

24 APRIL 1926

## Contents for 24 April 1926

	Page
DRAWING BY G. GALLI DA BIBIENA .. .. .	<i>To face</i> 359
REPORT OF THE COUNCIL FOR THE OFFICIAL YEAR 1925-26 .. .. .	359
THE SAFETY OF THE CITY CHURCHES. By Arthur Keen .. .. .	389
EXHIBITION OF THE WORK OF BERTRAM GROSVENOR GOODHUE. By Howard Robertson .. .. .	390
THE PUBLIC APPRECIATION OF ARCHITECTURE. By the Editor of <i>The Morning Post</i> .. .. .	390
THE BUILDING TRADES EXHIBITION. By John E. Yerbury .. .. .	391
ALLIED SOCIETIES :	
ABERDEEN .. .. .	392
BERKSHIRE .. .. .	392
DEVON AND CORNWALL .. .. .	392
HAMPSHIRE AND ISLE OF WIGHT .. .. .	393
NORTHERN .. .. .	393
SOUTH WALES .. .. .	393
BERKS, BUCKS AND OXON .. .. .	394
NEW SOUTH WALES .. .. .	395
LONDON BUILDING ACTS (AMENDMENT) ACT, 1905—FIRST SCHEDULE .. .. .	395
PROPOSED FINE ART COMMISSION FOR SCOTLAND .. .. .	396
NATIONAL HOUSING AND TOWN PLANNING COUNCIL .. .. .	396
A.B.S. SCHEME OF INSURANCE .. .. .	396
BOARD OF ARCHITECTURAL EDUCATION .. .. .	396
NOTICES .. .. .	396
COMPETITIONS .. .. .	399
MEMBERS' COLUMN .. .. .	400
MINUTES .. .. .	400



FROM AN ORIGINAL DRAWING BY F. GALLI DA BIBIENA

R.I.B.A. Collection





## Report of the Council for the Official Year 1925-1926

SINCE the publication of the last Annual Report, the Council have held 12 meetings.

The following Boards and Committees appointed by the Council have met and reported from time to time on the matters referred to them:—

Architects' and Builders' Consultation Board.  
Board of Architectural Education.  
British Architects' Conference Executive Committee.  
Competitions Committee.  
Conditions of Contract Committee.  
Executive Committee.  
Finance and House Committee.  
London Building Acts Committee.  
Premises Committee.

Registration Committee.  
R.I.B.A. Exhibition Joint Committee.  
Royal Gold Medal Committee.  
Selection and General Purposes Committee.  
Sessional Papers Committee.  
Street Architecture Jury.  
Thames Bridges Conference.  
Town Planning and Housing Committee.

Particulars of the work of these Boards and Committees, so far as they are available for publication, are embodied in this Report.

**Mr. Leonard Stokes, Past-president.** It is with the deepest regret that the Council have to record the loss during the past year of another distinguished Past-President. Mr. Leonard Stokes had for many years made a heroic struggle against ill-health. His many services to the Royal Institute and to the profession, as a member of Council, a Vice-President, and as President in the years 1910-1912, when he presided over the Town Planning Conference and initiated the movement towards unification which has recently been completed, will long be remembered.

**Obituary.** The losses by death have been as follows:—

### HONORARY FELLOWS.

The Rt. Hon. Viscount Leverhulme.  
The Rt. Hon. Viscount Milner, K.G.,  
P.C., G.C.B., G.C.M.G., Hon.  
D.C.L. Oxon., LL.D. Cantab.

### HONORARY ASSOCIATES.

Leslie : Colonel Francis Seymour.  
Thornycroft : Sir William Hamo,  
R.A.

### HONORARY CORRESPONDING MEMBERS.

Barber : Donn (America).  
Boni : Commendatore Giacomo  
(Italy).  
Homolle : Jean Théophile, Litt.D.  
Cantab. (France).  
Nordhagen : Professor Olaf (Nor-  
way).

### FELLOWS.

Ashworth : Charles Herbert.  
Benwell : John Wayland.  
Brown : William Lobin Trant.  
Calvert : Rhodes.  
Cowdell : William Morton.  
Daubney : Charles Archibald.  
Forbes : James.  
Fry : Lt.-Col. Peter George.  
Gale : Ernest Sewell.  
Gardner : Alexander.  
Gill-Knight : John Albert.  
Harrison : William Henry.  
Howell : Albert.  
Ingelow : Benjamin.  
Kennard : John Harold.  
Paterson : Henry Leslie.  
Pearson : Harry Dighton.

### FELLOWS—cont.

Spoor : Stanley Miles.  
Stokes : Leonard Aloysius Scott.  
Thomas : Richard Wellings.  
Westwick : Louis Alfred.  
Wratten : Edmund Livingstone.  
Wylson : Oswald Cane.  
Young : Robert Magill.

### RETIRED FELLOWS.

Jerman : James.  
Plummer : Arthur Benjamin.  
Ross : Alexander.  
Samson : Charles Henry.  
Sheffield : Henry Needham.  
Smith : Stephen Ernest.  
Tarring : Frederick William.  
Wynne : John.

RETIRED MEMBERS, S.A.  
Greatbach : Daniel Westwood.  
Newson : Charles.

ASSOCIATES.  
Chapman : Henry.  
Jago : Ernest Thomas.  
Phibbs : Harry.  
Protheroe : Frank.  
Wood : Walter Bryan.

LICENTIATES.  
Algar : Albert Edmund.  
Barron : Miles.  
Calvert : Vere.  
Davies : David.  
France : James Harold.  
Garlick : Edward.  
Garrood : Thomas Merrison.  
Haslewood : Noel Alfred Fitz-herbert.

LICENTIATES—*cont.*  
Jones : Rowland Lloyd.  
Margetts : William Thomas.  
Mercer : Charles Edward.  
Messervy : Charles.  
Robertson : Alan Keith.  
Stains : Leonard Robert.  
Thomson : Alexander Caldwell.  
Walker : Fred

**Membership.** The following table shows the present membership of the Royal Institute, compared with the preceding five years :—

	Fellows.	Associates.	Licentiates.	Hon. Fellows.	Hon. Associates.	H.C.M.	Ret. F.'s.
1921 ..	969	2,032	1,537	12	45	41	43
1922 ..	969	2,214	1,487	12	45	38	45
1923 ..	964	2,316	1,408	10	54	45	47
1924 ..	970	2,335	1,364	11	54	38	55
1925 ..	1,182	2,319	1,965	10	65	43	52
1926 ..	1,338	2,390	2,211	9	78	50	47
			Subscribers.	Students.	Probationers.		
			1926 .. 14	570	1,606		

During the official year since the last Annual General Meeting, 183 Fellows, 138 Associates, and 392 Licentiates have been admitted, as against 228 Fellows, 42 Associates and 650 Licentiates in the previous year.

Of the 1,338 Fellows whose names appear in the current *Kalendar*, 512, or 38 per cent., were elected from the Associate Class ; 243, or 18 per cent., were elected from the Licentiate Class after examination ; 319, or 24 per cent., were elected without examination, under the conditions which existed before the grant of the Charter of 1909 ; 242, or 18 per cent., were admitted under the Charter of 1925, and 22, or less than 1 per cent., were elected by the Council under Clause 2 of the Charter of 1909.

Of the 2,390 members of the Associate Class, 1,256, or 52 per cent., have been elected since the date of the Armistice. Of the 2,211 Licentiates, 1,223, or 55 per cent., were admitted under the Charter of 1909, and 988, or 45 per cent., under the Charter of 1925.

**R.I.B.A. Unification and Registration** The 12 months just ended have witnessed the completion of the process of amalgamation of the Royal Institute and the Society of Architects. The members of the Society have practically all entered the appropriate Classes. 220 of the Fellows of the Society have become Fellows of the R.I.B.A., 967 of the members of the Society have become Licentiates, 27 Licentiates of the Society have become Students and 92 Students have become Probationers. 13 of the Honorary Members of the Society have become Hon. Associates. Since their transfer 30 Licentiates (ex-members of the Society) have been elected Fellows after passing the required examination, and 10 have been elected Fellows under the provisions of the Supplemental Charter, 1925, Section 4, Clause C (ii). 101 Students (ex-Licentiates of the Society) have become Licentiates of the R.I.B.A. on attaining the required qualifications, 32 Licentiates (ex-members of the Society) who held their qualification by examination, have passed the required examination and have been elected Associates.

The Council desire to express to the ex-members of the Society generally and to the Council and staff of the Society in particular their sincere appreciation of the spirit which has animated them during the whole course of the amalgamation proceedings which culminated in the handing over to the Royal Institute of the whole of the valuable assets of the Society.

The union of the two bodies was marked by two social events that are worthy of record. On 23 March 1925 the members of the Council of the Royal Institute entertained at dinner at the Trocadero Restaurant the members of the Council of the Society. The members of the united body and a number of distinguished visitors were entertained at a very successful and largely-attended soirée in the Galleries on Friday, 13 November 1925. The guests were received by the President and Mrs. Dawber, assisted by Mr. A. J. Taylor (Past-President of the Society of Architects) and Mrs. Taylor. Nearly 1000 persons were present.

The grant of the new Charter conferred upon all corporate members of the Royal Institute the right to the title "Chartered Architect." The Council have issued an appeal to all members to make use of this title, and it is rapidly becoming a general practice.

The Registration Committee has made substantial progress with its task and a report on the present position will be found among the Committee reports that follow.



**the Allied Societies.** The Council have had the pleasure of admitting to alliance the Tasmanian Institute of Architects and the Rhodesian Institute of Architects.

There are now 26 Allied Societies with 11 branches in the United Kingdom and Ireland, and 17 Allied Societies with 13 branches in the Dominions and Colonies overseas. The membership of the Allied Societies, as given in the current *Kalendar*, has now reached a total of 4,832, including 1,946 members of the Royal Institute. The membership of the Architectural Association is now 1,671, including 825 members of the Royal Institute. The membership of the Association of Architects, Surveyors and Technical Assistants is now 2,112, including members of the Royal Institute.

**Assessors.** Since the issue of the last Annual Report, the following Assessors have been appointed on the President's nomination :—

- Doncaster Isolation Hospital for Infectious Diseases—Mr. T. R. Milburn [F.].
- Rotherham Public Elementary School—Mr. W. Carby Hall [F.].
- Oldbury Elementary School—Mr. W. S. Skinner [F.].
- Coventry and Warwickshire Hospital : Extensions—Mr. C. E. Bateman [F.].
- Leicester Convalescent Home for Children—Major H. C. Corlette [F.].
- Topsham Public Hall—Mr. Walter Cave [F.].
- Manchester Town Hall : Extensions—Mr. T. R. Milburn [F.], Mr. Robert Atkinson [F.] and Mr. Ralph Knott [F.].
- Coventry New Department for Boys, Earlsdon Council School—Mr. S. F. Harris [F.].
- Blackpool Memorial Clock Tower—Mr. E. Bertram Kirby [F.].
- West Bromwich Permanent Benefit Building Society : Larger offices—Mr. W. Alexander Harvey [F.].
- Glasgow : Scottish Legal Life Assurance Society : Enlarged premises—Mr. John Keppie, A.R.S.A. [F.].
- Harrow : Church Hall (Headstone)—Mr. W. H. Ansell [F.].
- Purley Council Offices and Fire Station—Mr. P. D. Hepworth [F.].
- Australia : Canberra War Memorial—Sir Reginald Blomfield, R.A. [F.], Adjudicator.

**Arbitrators.** Since the issue of the last Annual Report the President has appointed the following members to act as Arbitrators in connection with building disputes :—

- |                                |                              |
|--------------------------------|------------------------------|
| Mr. Louis Ambler [F.].         | Mr. E. Bertram Kirby [F.].   |
| Mr. H. V. Ashley [F.].         | Mr. E. C. P. Monson [F.].    |
| Mr. W. H. Atkin-Berry [F.].    | Mr. Eric Morley [F.].        |
| Mr. Max Clarke [F.].           | Mr. Basil Oliver [A.].       |
| Mr. Heaton Comyn [F.].         | Mr. E. J. Partridge [F.].    |
| Major H. C. Corlette [F.].     | Mr. T. Taliesin Rees [F.].   |
| Mr. A. W. S. Cross [F.].       | Mr. J. Douglas Scott [A.].   |
| Mr. C. F. W. Dening [F.].      | Mr. H. D. Searles-Wood [F.]. |
| Mr. G. Leonard Elkington [A.]. | Mr. W. S. Skinner [F.].      |
| Sir Banister Fletcher [F.].    | Mr. J. Alan Slater [F.].     |
| Mr. J. Leighton Fouracre [F.]. | Mr. A. L. Snow [A.].         |
| Mr. J. Ernest Franck [F.].     | Mr. A. J. Taylor [F.].       |
| Mr. F. T. W. Goldsmith [F.].   | Mr. Herbert A. Welch [F.].   |
| Lt.-Col. P. A. Hopkins [L.].   | Mr. T. M. Wilson [F.].       |
| Mr. Francis Jones [F.].        | Mr. Edmund Wimperis [F.].    |
| Mr. Arthur Keen [F.].          | Mr. Charles Woodward [A.].   |

**Grants.** Since the issue of the last Annual Report the Council have made the following grants :—

Architectural Association	£100 0 0	British Engineering Standards Association	£5 0 0
Architectural Association Special Grant	100 0 0	British School at Rome, Faculty of	
Architects' Benevolent Society	100 0 0	Archæology	3 3 0
British School at Rome	100 0 0	Durham Castle Repair Fund	100 0 0
Architects' and Surveyors' Approved Society	30 0 0	Franco-British Union	20 0 0
Bribery and Secret Commissions Prevention League	10 10 0	Royal West of England Academy School of Architecture	50 0 0

**the Royal Gold Medal.** The Royal Gold Medal for the year 1925 was awarded to Sir Giles Gilbert Scott, R.A., in recognition of the merit of his work as an Architect. This year the Medal is to be awarded to Ragnar Ostberg (Hon. Corr. Member), of Stockholm. His Majesty has graciously signified his approval of the award, and the Medal will be presented on 17 June 1926.

**Appointments.** During the Session the Council have made the following appointments of members to represent the Royal Institute on the various bodies or for the purposes indicated :—

- ANCIENT MONUMENTS BOARD (ENGLAND)—Sir Reginald Blomfield [F.].
- PROFESSIONAL CLASSES AID COUNCIL—Sir A. Brumwell Thomas [F.].
- KENT RURAL COMMUNITY COUNCIL CONFERENCE—Mr. F. R. Hiorns [F.].
- BRITISH ENGINEERING STANDARDS ASSOCIATION SECTIONAL COMMITTEE ON BUILDING MATERIALS—Mr. Percival M. Fraser [F.].
- NATIONAL HOUSING AND TOWN PLANNING COUNCIL : Visit to Holland—Mr. T. Alwyn Lloyd [F.].
- INTERNATIONAL TOWN PLANNING FEDERATION CONFERENCE, NEW YORK—Professor Beresford Pite [F.].

GENERAL COUNCIL FOR THE NATIONAL REGISTRATION OF PLUMBERS—Mr. Arthur J. Hope [F].

STREATHAM COMMON EXTENSION SCHEME—Professor S. D. Adshead [F].

BRITISH ENGINEERING STANDARDS ASSOCIATION SUB-COMMITTEE ON ASPHALT FOR ROOFING—Mr. Max Clarke [F].

BRITISH ENGINEERING STANDARDS ASSOCIATION SUB-COMMITTEE ON ASBESTOS CEMENT SHEETING—Mr. Percival M. Fraser [F].

BRITISH ENGINEERING STANDARDS ASSOCIATION SUB-COMMITTEE ON EXPANDED METAL AND EXPANDED METAL LATHING—Mr. H. Haylock Golding [A].

COURT OF GOVERNORS OF THE UNIVERSITY COLLEGE OF THE SOUTH-WEST OF ENGLAND—Mr. J. Leighton Fouracre [F].

INSTITUTION OF PUBLIC LIGHTING ENGINEERS' SECOND ANNUAL MEETING AND CONFERENCE, LEEDS—Mr. W. Alban Jones [F].

BRITISH WATERWORKS ASSOCIATION, STANDING COMMITTEE ON WATER REGULATIONS—Mr. Percival M. Fraser [F] and Mr. H. D. Searles-Wood [F].

BRITISH ENGINEERING STANDARDS ASSOCIATION SECTIONAL COMMITTEE ON VITRIFIED WARE PIPES—Mr. R. J. Angel [A].

BRITISH ENGINEERING STANDARDS ASSOCIATION SUB-COMMITTEE ON CAST IRON, HALF ROUND, O.G. AND OTHER MOULDED GUTTERS—Mr. Max Clarke [F] and Major Charles F. Skipper [F].

BRITISH ENGINEERING STANDARDS ASSOCIATION SECTIONAL COMMITTEE ON SAND-LIME BRICKS—Mr. H. D. Searles-Wood [F] and Mr. T. Wallis [F].

BRITISH ENGINEERING STANDARDS ASSOCIATION SUB-COMMITTEE, MATERIALS AND MANUFACTURE—Mr. H. D. Searles-Wood [F] and Mr. T. Wallis [F].

ARCHAEOLOGICAL CONGRESS IN PALESTINE AND SYRIA—Mr. Frank Mears.

FORTY-NINTH ANNUAL CONGRESS OF FRENCH ARCHITECTS—Lt.-Col. H. P. Cart de Lafontaine [A].

UNIVERSITY OF LONDON ARCHITECTURAL EDUCATION COMMITTEE—Mr. Arthur Keen [F] and Mr. Maurice E. Webb [F].

FOUNDLING HOSPITAL ESTATE JOINT COMMITTEE—Mr. D. Barclay Niven [F].

ARCHAEOLOGICAL JOINT COMMITTEE FOR ORGANISING THE CONTROL OF ANTIQUITIES IN THE NEAR AND MIDDLE EAST—Mr. Ernest Richmond [F].

ROYAL SANITARY INSTITUTE IMPERIAL CONGRESS, LONDON, 1926—Mr. J. Ernest Franck [F] and Mr. H. D. Searles-Wood [F].

BRITISH ENGINEERING STANDARDS ASSOCIATION SUB-COMMITTEE ON A STANDARD SPECIFICATION FOR GREY AND WHITE HYDRATED LIME—Mr. Harvey R. Sayer [A].

BRITISH ENGINEERING STANDARDS ASSOCIATION SUB-COMMITTEE ON STANDARDISATION AND SIMPLIFICATION WITH REGARD TO SLATES AND TILES—Mr. Edwin Gunn [A].

BRITISH ENGINEERING STANDARDS ASSOCIATION MAIN COMMITTEE—Mr. Alan E. Munby [F] and Mr. J. Ernest Franck [F].

#### Sessional Papers.

The following Papers have been read since the issue of the last Annual Report :—

"The Architectural Development of American Cities," by Mr. G. Topham Forrest [F], Architect to the London County Council.

"The Architect and his City," by Dr. Raymond Unwin [F].

"The Condition of the Building Industry with especial regard to the Shortage of Skilled Labour and the Increased Cost of Work," by Mr. Herbert A. Welch [F].

"Some Problems in the Construction of Buildings Considered Experimentally," by Professor E. G. Coker, D.Sc., F.R.S. M.Inst.C.E.

"Lincoln Cathedral," by Sir Charles Nicholson, Bt., M.A. Oxon [F], and Sir Francis Fox, J.P. [Hon. Assoc.].

"The Paris Exhibition of 1925," by Lt.-Col. H. W. G. Cole, C.S.I., O.B.E.

"The Making of a Slum," by Mr. George H. Duckworth, C.B., F.S.A.

"The Co-operation of Architect and Craftsman," by Mr. Gilbert Bayes and Mr. Laurence Turner.

#### Annual Conferences.

The Annual Conference of 1925 was held at Newcastle and Durham at the invitation of the Northern Architectural Association. The arrangements for the Conference were made by an Executive Committee appointed by the Council of the Association, and the thanks of the R.I.B.A. and of all the Allied Societies are due to the members of this Committee for the admirable work which they did. The generous hospitality of the Association, the cities of Newcastle and Durham, the authorities of the Armstrong College, and the University of Durham, and of others who contributed to the success of the Conference were cordially appreciated by all who took part. At the request of the Allied Societies the British Architects' Conference of 1926 will be held in London, from 14 June to 19 June. A Grand Committee has been formed which, with the aid of an Executive Committee and various Sub-Committees, will carry out the arrangements for the Conference. Full particulars will be sent to all members and to the Allied Societies at an early date.

#### Annual Dinners.

The Annual Dinner of the R.I.B.A. was held at the Trocadero Restaurant on Tuesday 12 May. The Annual Dinner of 1926 will be combined with the Conference Banquet and will be held on 17 June. Further particulars will be issued in due course.

#### The R.I.B.A. Prizes and Studentships.

The Deed of Award of the various Prizes and Studentships was presented to the Royal Institute at the General Meeting on 18 January, when a criticism of the work submitted was read by Mr. H. S. Goodhart-Rendel [F]. An Exhibition of the Drawings was held from 19 January to 1 February in the R.I.B.A. Galleries and was well attended. A selection of the Prize Drawings is now being sent round the Allied Societies for exhibition in various centres.



**The Henry Jarvis Trust.** The following statement has been received from the Trustees :—  
The Capital, mostly invested in Colonial Government Securities, was, on 31 December 1925, of the nominal value of £16,293 4s. 7d.

The Income received during the year 1925 (including Income Tax refunded) amounted to £557 8s. 10d.

The Income available for distribution at the end of 1925 was represented by a sum of £500 still remaining invested in 5 per cent. War Bonds as available income, together with a balance at the bank of £394 6s.

**Exhibitions.** The following Exhibitions have been held in the Galleries during the period under review :—

Drawings and Photographs of the Churches in the City of London.

Work of Students of the Northern Polytechnic.

Drawings and Photographs of the works of Sir Giles Gilbert Scott, R.A., LL.D., Royal Gold Medallist, 1925.

Designs submitted in the Competition for the Royal Hospital School, Holbrook, near Ipswich.

Designs by Students exempted from the R.I.B.A. Intermediate and Final Examinations.

Architecture Club Exhibition.

R.I.B.A. Prizes and Studentships.

Architects' Working Drawings.

Garden Designs.

**The R.I.B.A. Travelling Cards.** Since the issue of the last Annual Report, 111 Travelling Cards have been issued for the use of members and students visiting places of interest abroad ; 45 cards have been issued for use in the United Kingdom.

**Public Architecture.** At a Special General Meeting held on 16 February 1925 the following Resolution was passed :—

“ That all public buildings paid for out of the rates or other public funds should be technically and architecturally worthy of the locality. To achieve this end, the design of such buildings should either be the subject of competition or entrusted to a qualified architect ; and, further, that this resolution, if approved, be forwarded to the appropriate authorities.”

**Fees for Housing Work.** At a Special General Meeting on 16 February 1925 a Special Scale of Architects' Fees applicable to housing work was approved by the General Body, and was in due course published and copies forwarded to the Ministry of Health and the local authorities concerned.

**Waterloo Bridge.** The Conference of Societies urging the preservation of Waterloo Bridge has been at work throughout the year.

On 30 June 1925 it submitted a report to the L.C.C. containing definite proposals for underpinning the existing structure.

On 26 October 1925, at the request of the L.C.C., the Conference submitted a further report, suggesting a reference of the technical point at issue to the First Commissioner of Works.

On 15 December 1925 the L.C.C. rejected the report of the Special Bridges Committee which had advised that the action recommended by the Conference should be taken, and decided that a new bridge should be erected.

The Conference then submitted to the Prime Minister a request for Government intervention to save the Bridge. The Prime Minister's decision is still awaited.

**Wages Slips on Tenders.** On the recommendation of the Joint Consultation Board for the Building Industry, it was agreed that the affixing of slips on tenders providing for adjustments to be made in the event of a rise or fall in wages should be approved for the twelve months ending 25 March 1926.

**Architects' Club.** A Joint Committee of the R.I.B.A. and the A.A. considered a proposal for the establishment of an Architects' Club in connection with the A.A. premises in Bedford Square, and the Council made a grant of £100 towards the cost of preparing a scheme. The Council regret that the heavy cost of the proposal made it impossible for them to approve it.

**Wet Time in Building Labour.** The Council welcomed the publication in *The Times* of 23 April 1925 of particulars of a scheme which had been successfully applied by a London builder for meeting the “ wet time ” grievance of the Building Trades' operatives.

**Institution of the Council.** The Privy Council sanctioned several modifications of the R.I.B.A. Bye-Laws which aimed at improving the representative character of the Council. The Chairman of the Board of Architectural Education and the Chairmen of the four Standing Committees will in future be *ex officio* members of the Council, and the great Allied Societies in the Dominions will be represented both

by their Presidents (or other local representatives) and by members of the Council specially appointed for the purpose.

**Architectural Honours.** The knighthood conferred upon Sir George Oatley by the King in recognition of his work as architect, in conjunction with Mr. G. C. Lawrence, of the new Bristol University Buildings has given great pleasure to his colleagues in the profession.

**Subscribers.** The newly created Class of "Subscribers" of the Royal Institute was opened in May 1925, and up to date 14 candidates have been elected. The object of this Class is to bring into intimate touch with the R.I.B.A. laymen who are interested in the development of architecture and the work of the Royal Institute generally, and members can contribute to its success by bringing it to the notice of such of their friends as they consider qualified for it.

**Exhibitions.** The following Exhibitions in the R.I.B.A. Galleries are being arranged :—

22 April to 15 May 1926.—Drawings of "The Bridges of France" by the late Pierre Vignal, and Messrs. Rosenberg and Chamberlain.

November–December 1926.—Dominion and Colonial Architecture.

1927.—Indian Architecture.

**The British School at Rome.** On the occasion of the retirement of Dr. Thomas Ashby, after his nineteen years of office as Director of the British School at Rome, the Council passed a resolution recording the thanks of the R.I.B.A. for his service to architecture and to students of architecture during that period.

The Council welcome the appointment of the new Director, Mr. Bernard Ashmole, and anticipate with confidence a continuance of the helpful relations which have always existed between the Royal Institute and the British School at Rome.

**Alleged Overcrowding in the Profession.** At the request of the Association of Architects, Surveyors, and Technical Assistants, the Council authorized the holding of an enquiry by a joint committee of the R.I.B.A. and the A.A.S.T.A. into the alleged overcrowding of the architectural profession.

A thorough investigation of the subject led to the production of an authoritative report, which was approved by the Council and published in the JOURNAL for 15 August 1925

Steps are being taken by the Board of Architectural Education to deal with certain aspects of the subject which were revealed by the report.

**R.I.B.A. Premises.** The question of re-housing the Royal Institute in suitable premises is engaging the attention of a strong Committee, and it is hoped that at an early date proposals will be laid before the General Body.

**The Council.** The Council, as reconstituted under the new Charter, now numbers 67 members, many of whom have to travel many hundreds of miles to attend the meetings.

For some years past, when the Council met fortnightly, an effort was always made to concentrate important business on alternate meetings, so that distant members should not have to attend for mere matters of routine. During the past year the Council have crystallised this procedure by appointing an Executive Committee, meeting alternately with the Council, to deal with all matters of routine, and to prepare and co-ordinate all business requiring the decision of the Council. The Executive Committee consists of the President (Chairman), the Honorary Secretary, the Chairmen of the Board of Architectural Education and of the four Standing Committees, and the Chairman and one other member of the Allied Societies Conference. Up to now this method has proved satisfactory in freeing the Council of a considerable amount of routine work and leaving it free to deal with questions of principle, with the result that the Council meetings have been very fully attended, and large agenda have been disposed of. Since this arrangement has been instituted the average attendance at each Council meeting has been 43.7.

## REPORT OF THE BOARD OF ARCHITECTURAL EDUCATION

Since the publication of the last Annual Report the Board have held eight meetings.

Mr. Maurice E. Webb, D.S.O., M.C., M.A.Cantab., was elected Chairman, Mr. Walter Cave and Mr. Henry M. Fletcher, M.A.Cantab., Vice-Chairmen, and Mr. L. Sylvester Sullivan, Hon. Secretary.



Pending the reconstitution of the Board, the Council in July 1925 approved the appointment of a small Interim Board to act until the reconstitution proposals had received the approval of the Council.

*The Reconstitution of the Board.*—In the year 1920 the Council of the R.I.B.A. decided on the reconstruction of the Board of Architectural Education as soon as the necessary powers had been granted by the Privy Council.

A new Charter having come into operation in March 1925 the matter was at once taken into consideration and the new constitution of the Board was approved by the Council in the same year.

It was decided to make the Board fully representative and bring it into touch with other bodies having interests allied to or bound up with those of architectural education, to enlarge its scope and to enable it to discharge its proper functions as the central authority, under the Council of the R.I.B.A., advising on architectural education throughout the kingdom and in the Dominions.

### 1. *Constitution of the Board of Architectural Education.*

- One representative from each School of Architecture recognised for exemption from the Final Examination (at present seven, omitting \*McGill University and \*Sydney University).
- Six representatives of the Governing Bodies of the Universities (including representatives of Oxford, Cambridge and London, and three others nominated by the Standing Committee of Vice-Chancellors and Principals of the Universities of Great Britain and Ireland).
- The Director of Education, School of Architecture, The Architectural Association.
- Schools of Architecture recognised for exemption only from the Intermediate Examination—one representative by invitation for every two schools (at present eight schools, including the Northern Polytechnic and the R.W.A. School of Architecture, Bristol, but excluding the \*Bombay School of Art and the \*University of Toronto).
- One representative of Polytechnics teaching architecture.
- One representative of Technical Schools teaching architecture. } nominated by the Society of Art Masters.
- One representative of Art Schools teaching architecture
- One representative of H.M. Board of Education.
- The Education Officer, London County Council.
- One representative of The Headmasters' Conference.
- One representative of The Association of Architects, Surveyors and Technical Assistants.
- One representative of The Institute of Builders.
- The Master of the Art Workers' Guild.
- One representative of The Royal Society of Arts.
- One representative of The Incorporation of Architects in Scotland.
- One representative of The Royal Institute of the Architects of Ireland.
- One representative of The British School at Rome, Faculty of Architecture.
- One representative of The Royal Academy School of Architecture.
- The President of the Town Planning Institute.
- The President R.I.B.A.
- The Hon. Secretary R.I.B.A.
- The Chairman of the Allied Societies' Conference.
- The President of the Architectural Association.
- Thirteen R.I.B.A. members, excluding the officers of the Board, to be appointed by the Council on the recommendation of the Board of Architectural Education (one-third, excluding the officers of the Board, to retire every year).

### 2. *Schools Committee.*

- Chairman: Professor C. H. Reilly, O.B.E., M.A.Cantab.
- One representative from each School of Architecture recognised for exemption from the Final Examination (at present seven, omitting McGill University and Sydney University).
- One representative from each School of Architecture recognised for exemption only from the Intermediate Examination (at present eight, including the Northern Polytechnic and the R.W.A. School of Architecture, Bristol, but excluding the Bombay School of Art and the University of Toronto).
- Six R.I.B.A. Members.
- One representative of H.M. Board of Education Inspector.
- The Education Officer, London County Council.
- One representative of Polytechnics, Technical Schools and Art Schools teaching architecture.
- Four Members of the R.I.B.A. Visiting Board.

### 3. *Prizes and Scholarships Committee.*

- Chairman: Mr. Walter Cave (a Vice-Chairman of the Board).
- Six R.I.B.A. Members.
- Six representatives of Schools of Architecture.
- Six R.I.B.A. and other Prize Winners.
- The Education Officer, London County Council.
- One representative of H.M. Board of Education.
- One representative of British School at Rome, Faculty of Architecture.

### 4. *Examinations Committee.*

- Chairman: Mr. Henry M. Fletcher, M.A.Cantab. (a Vice-Chairman of the Board).
- Three Members of the Board of Moderators.

\* The Headmasters of these Schools of Architecture have been appointed Corresponding Members of the Board and of the Schools Committee with the right (1) of receiving the Agenda of the Board and the Schools Committee, and (2) when in England, of attending the meetings of the Board and the Schools Committee.

Two representatives of the R.I.B.A. Examiners (Intermediate Examination and Final Examination).  
 One representative of the Registration Committee.  
 One representative of the R.I.B.A. Statutory Examiners.  
 One representative of the R.I.B.A. Town Planning Examiners.  
 Three representatives of the R.I.B.A. External Examiners.  
 Six R.I.B.A. Members.  
 One representative of the Association of Architects, Surveyors and Technical Assistants.

*Exemption from the Final Examination.*—The following Schools are now recognised, under the usual conditions, for exemption from the Final Examination :—

Robert Gordon's Colleges, Aberdeen.  
 Edinburgh College of Art.  
 Glasgow School of Architecture.  
 School of Architecture, University of Liverpool.  
 The Architectural Association, London.  
 London University School of Architecture.  
 School of Architecture, The Victoria University, Manchester.  
 Department of Architecture, McGill University, Montreal.  
 School of Architecture, The University, Sydney.

*Exemption from the Intermediate Examination.*—The following Schools are now recognised, under the usual conditions, for exemption from the Intermediate Examination :—

Robert Gordon's Colleges, Aberdeen.  
 R.W.A. School of Architecture, Bristol.  
 Birmingham School of Architecture.  
 Cambridge University School of Architecture.  
 The Technical College, Cardiff.  
 Edinburgh College of Art.  
 Glasgow School of Architecture.  
 Leeds School of Art.  
 School of Architecture, University of Liverpool.  
 The Architectural Association, London.  
 London University School of Architecture.  
 Department of Architecture, Surveying and Building, The Northern Polytechnic, London.  
 School of Architecture, The Victoria University, Manchester.  
 School of Architecture, Armstrong College, Newcastle-on-Tyne.  
 Department of Architecture, The University, Sheffield.  
 Bombay School of Art.  
 Department of Architecture, McGill University, Montreal.  
 School of Architecture, The University, Sydney.  
 School of Architecture, University of Toronto.

In the case of the School of Architecture of the Polytechnic, Regent Street, it has been decided that subjects set and prepared in the School shall be accepted, under certain conditions, in lieu of the R.I.B.A. Testimonies of Study and marked by the Problems in Design and Testimonies of Study Examiners.

*Town Planning and the Final Examination.*—It has been decided that a paper on the Outline of the History and Practice of Town Planning shall be included in the R.I.B.A. Final Examinations as an alternative to the Paper on Advanced Steel Construction or Hygiene.

*Secondary Schools and Lectures on Architecture.*—On the recommendation of the Board, the Allied Societies in Great Britain and Ireland have been urged by the Allied Societies' Conference to inaugurate lectures on Architecture in the Secondary Schools in their districts.

*The Associateship of the R.I.B.A. and Students of Recognised Schools exempted from the Final Examination.*—The Council have decided, on the recommendation of the Board, that students of recognised Schools who are entitled to exemption from the Final Examination shall be required to come up for election as Associates within two years of the completion of their School course exempting them from the Final Examination, and that students who do not present themselves for election as Associates within these two years, except with the special permission of the Board, shall be required to take the R.I.B.A. Final Examination in the usual way if they wish to qualify for candidature as Associates.

*Scholarships at Recognised Schools of Architecture.*—A list of Scholarships at recognised Schools of Architecture has recently been compiled. This list is now printed in the pamphlet "Membership of the R.I.B.A.," and a copy is inserted in each form of application for registration as Probationer sent out from the R.I.B.A.

*Maintenance Scholarships.*—In addition to the contributions to the Maintenance Scholarship Fund promised by the Council of the R.I.B.A., the late Society of Architects and the Proprietors of the *Builder*, the Artists' General Benevolent Institution have decided to grant a Maintenance Scholarship under



certain conditions, while in the case of Allied Societies, in addition to participating in the grant of £100 per annum made by the Council R.I.B.A., certain Allied Societies have promised contributions to the Maintenance Scholarship Fund.

The Maintenance Scholarship Committee which will be responsible, subject to the Board and the Council, for the administration of the Scholarship Scheme, has been appointed and is making the necessary arrangements for giving effect to the provisions of the Scheme.

*The Prizes and Studentships: List of Winners. The Prizes for Design.*—The Tite Prize: Mr. A. Calvaley Cotton (University of Liverpool). The R.I.B.A. (Henry Jarvis) Travelling Studentship at the British School at Rome: Mr. C. A. Minoprio (University of Liverpool). The Rome Scholarship: Mr. G. A. Butling (University of Liverpool).

*Post Graduate Prizes.*—The R.I.B.A. (Alfred Bossom) Travelling Studentship: Miss Doris A. Lewis (Architectural Association). The Owen Jones Studentship: Mr. E. Dinkel. The Grissell Gold Medal: Mr. John Wm. Wood (Architectural Association).

*Other Prizes.*—The R.I.B.A. (Anderson and Webb) Scholarship at the School of Architecture, Cambridge University: Mr. R. F. Henniker and Mr. C. D. G. Nicholson. The R.I.B.A. (Archibald Dawney) Scholarships: Mr. John Breakwell (Architectural Association); Mr. W. R. Brinton (Architectural Association); \*Mr. R. P. Cummings (Architectural Association). The R.I.B.A. Silver Medal for Recognised Schools: Miss Frances T. Silcock (Liverpool University). The Ashpitel Prize: Mr. Christopher Green. The R.I.B.A. (Howard Colls) Travelling Studentship at the Architectural Association: Mr. D. R. Burles. The R.I.B.A. Donaldson Medal at the Bartlett School of Architecture, University of London: Mr. H. A. Johnson.

*Book of Proceedings of the International Congress on Architectural Education, 1924.*—In December 1925 the Book of Proceedings of the International Congress on Architectural Education was published. The Congress was the first of its kind held, and the Book of Proceedings marks the first occasion upon which the representative views of different nations upon the subject of the History, present position and development of Architectural Education have been gathered together. Mr. Rudolf Dircks (R.I.B.A. Librarian and Editor) acted as Editor. Copies of the book may be obtained at the R.I.B.A., price 10s. 6d.

*Exhibition of Architects' Working Drawings.*—An Exhibition of Architects' Working Drawings was held in February 1926. The Exhibition included drawings kindly lent by:—Mr. Thomas Hastings and Professor C. H. Reilly (Devonshire House); Messrs. Hennell and James (a House at Hampstead Garden Suburb); Mr. L. Sylvester Sullivan (Building for Courtaulds, Ltd.).

A Students' Evening was held in connection with the Exhibition. There was a large attendance of students, and the Architects whose drawings were exhibited kindly attended to talk to the students about their respective drawings.

*Exhibition of Work of the Northern Polytechnic.*—In June an Exhibition of the work of the students of the Northern Polytechnic was held in the R.I.B.A. Galleries. The Exhibition proved of great value to those interested in the teaching of the crafts of building and their connection with the art of architecture.

*Cambridge University School of Architecture.*—The Board have been informed that the University Commissioners have recommended the establishment of a Faculty of Fine Arts in the University, and have decided that architecture shall be a Department under this Faculty.

*Registration as Probationer.*—All Members of the R.I.B.A. and the Public and Secondary Schools in England, Scotland and Wales have been circularised and informed as to the standard required for probationership of the R.I.B.A.

*The Special Examination qualifying for candidature as Associate R.I.B.A.*—The regulations governing admission to the Special Examination, which has hitherto been open to Architects in practice over 25 years of age and to Chief Assistants over 30 years of age, have been amended so as to permit all Assistants of 10 and over, whose applications are approved by the Board to take the Examination.

*Informal Conference of Teachers of Recognised Schools.*—On the 26 September 1925, the Board held an Informal Conference of Teachers. The Conference, which it is intended to hold annually, was well attended and interesting discussions on various subjects took place.

*Corresponding Members of the Board.*—Prior to the reconstitution of the Board of Architectural Education, the Council appointed annually certain Advisory Members of the Board, some resident in

---

\* Special Additional Scholarship.

Great Britain and some resident overseas. With the reconstitution of the Board the need for Advisory Members resident in Great Britain disappeared, because the Board with its enlarged constitution is fully representative and in touch with all other bodies whose interests are dependent upon it or who are able to be of service to it.

The Council felt, however, that it is extremely desirable that a link should be maintained between the Board and the Dominions overseas, and they have therefore appointed the following Corresponding Members of the Board :—

Rodney H. Alsop, Victoria, Australia.  
 Professor Claude Batley, School of Architecture, Bombay.  
 Robert Cable, Bombay.  
 Professor Percy Nobbs, McGill University, Montreal.  
 E. M. Powers, Hon. Secretary R.I.B.A. for South Africa.  
 S. Hurst Seager, New Zealand.  
 B. M. Sullivan, Lahore, India.  
 Sir John Sulman, Sydney, Australia.  
 Professor Ramsay Traquair, McGill University, Montreal.  
 Professor Leslie Wilkinson, University of Sydney.  
 The President, Singapore Society of Architects.

The Council have also appointed those Corresponding Members of the Board who are Teachers in Schools of Architecture as Members of the Schools Committee. They have also decided that the Corresponding Members of the Board and the Schools Committee shall have the right when in England of attending the meetings of the Board and the Schools Committee, and shall always receive the agenda of the Board and the Schools Committee.

*R.I.B.A. Examination in Professional Practice and Scottish Students.*—In view of the difficulty experienced by Scottish candidates in dealing with the papers in Professional Practice set in London, a Scottish representative has been added to the Examiners in Professional Practice.

*Registration as Probationer : Headmaster's Certificate.*—The Council have decided that, except in very special cases, a Headmaster's Certificate will not be accepted after 1 October 1927, and no one will be registered as a Probationer without having passed one of the recognised public examinations in the required subjects.

*Registration as Probationer : List of Examinations Recognised.*—The Council, on the recommendation of the Board, have decided to include the following examinations in the list of examinations recognised, provided the certificates submitted cover the required subjects :—

Day School Certificate (Higher) Examination of the Scottish Education Department.  
 Leaving Certificate Examination, Scottish Education Department.  
 School Certificate Examination, University of Durham.

*Commonwealth Fund Fellowships.*—The Board have been in communication with the Committee of Award for the Commonwealth Fund Fellowships with a view to securing a large proportion of first-class applicants in Architecture.

*R.I.B.A. Examinations in the Dominions Overseas.*—The Council, on the recommendation of the Board, have approved a scheme for linking up the R.I.B.A. system of qualification with the new State systems of registration which exist in the Dominions.

*R.I.B.A. Final Examination in India.*—The Council have decided that the R.I.B.A. Final Examination shall be held in India, under certain conditions, by the Bombay Architectural Association.

*Register of Advanced Students of Recognised Schools.*—In order to complete their qualifications for exemption from the R.I.B.A. Final Examination, students are required to have spent twelve months in practical office work. Arrangements have now been made for keeping at the R.I.B.A. a register for students requiring positions in offices for this purpose, and in addition a register of the names of architects willing to take such students has been established.

*London County Council Scholarships in Architecture.*—The London County Council have decided that all applications for L.C.C. Scholarships in Architecture shall be referred to the Board for a report upon their order of merit.

*R.I.B.A. Journal and Registered Students of the R.I.B.A.*—On the recommendation of the Board, it has been decided that Registered Students of the R.I.B.A. shall receive the R.I.B.A. Journal free of charge



*Relegated Candidates and the Intermediate, Final and Special Examinations.*—The Council, on the recommendation of the Board, have decided that candidates relegated in the Examinations shall be required to pay a fee of 10s. 6d. for each subject in which they have been relegated on each occasion upon which they present themselves for examination, instead of paying the whole examination fee on each occasion, after their first two attempts, upon which they present themselves for examination.

*R.I.B.A. Form of Articles of Pupilage.*—The Council, on the recommendation of the Board, have approved for issue a revised form of Articles of Pupilage.

*Certificate of Office Experience.*—The Board have approved a certificate of office experience for use by students of Recognised Schools.

*R.I.B.A. Visiting Board.*—The Visiting Board for 1925 was constituted as follows :—

Mr. W. Curtis Green, A.R.A.  
Mr. Henry M. Fletcher.  
Professor C. H. Reilly.  
Mr. Maurice E. Webb.

Mr. Martin S. Briggs (H.M.I.) has accompanied the Visiting Board upon its visits to those Schools of Architecture which have official relations with H.M. Board of Education.

During the past year Reports on the following Schools have been approved by the Council and forwarded to the respective Governing Bodies :—

Leeds School of Art.  
Department of Architecture, University of Sheffield.  
Birmingham School of Architecture.  
Department of Architecture, Armstrong College, Newcastle-upon-Tyne.  
School of Architecture, University of London.  
Department of Architecture, Surveying and Building, Northern Polytechnic, London.  
The Polytechnic, Regent Street, W.

For the year 1926 the following have been appointed to constitute the Visiting Board :—

Mr. Maurice E. Webb.  
Mr. Henry M. Fletcher.  
Mr. L. Sylvester Sullivan.  
Mr. Howard Robertson.

Mr. Martin S. Briggs will again accompany the Visiting Board upon certain of its visits.

The Council received from the Board a report of the action taken as a result of the reports of the Visiting Board by the Schools visited during the last two years.

The following Schools are included in the report :—

The Architectural Association School of Architecture.  
University of Manchester School of Architecture.  
The Northern Polytechnic, Department of Architecture, Surveying and Building.  
University of Cambridge School of Architecture.  
University of Liverpool School of Architecture.  
Edinburgh College of Art, School of Architecture.  
Royal West of England Academy School of Architecture, Bristol.  
The Technical College, Cardiff, Department of Architecture.  
University of London, Bartlett School of Architecture.

The reports from the various Schools show that the suggestions made by the Visiting Board have been found to be of great value, and the Board has received numerous letters from the Schools visited expressing gratitude for the helpful action of the Visiting Board.

*Conference between the Board and Teachers of Building.*—On 28 July 1925, the Board held a Conference with the representative Teachers of Building who were undergoing a course in London arranged by H.M. Board of Education.

Papers were read by Professor Beresford Pite [F.] and Mr. Martin S. Briggs [F.], H.M. Inspector, on the Teaching of Building Construction from the Architect's and the Teacher's points of view respectively.

At the conclusion of the Conference, which was largely attended, the Teachers inspected examples of Architects' Working Drawings which had been kindly lent for exhibition in the Galleries.

*Exhibition of Designs of Students exempted from the R.I.B.A. Intermediate and Final Examinations.*—The Exhibition was held in the R.I.B.A. Galleries in September 1925.

The designs were inspected by the Board and the Exhibition was subsequently opened to the public.

*Problems in Design and Testimonies of Study.*—During the year ending 28 February 1926, 295 designs have been received and 229 have been approved. Whenever possible successful designs have been exhibited in the Galleries for the information of students.

*Registration as Probationer.*—During the year ending 28 February 1926, 490 Probationers have been registered.

*The Intermediate, Final and Special Examinations.*—The Intermediate Examination has been held twice in England and twice in Cape Town.

The Final and Special Examinations have been held twice in England and once in Sydney, Pretoria and Canada.

	Passed in Recognised Schools.	Examined.	Passed.	Relegated.	Percentage Passed.
INTERMEDIATE EXAMINATION—England . . . . .	106	136	74	62	54
Cape Town . . . . .	—	4	3	1	75
FINAL AND SPECIAL EXAMINATIONS—England . . . . .	47	125	*67	62	53
		7 Part 1 only 2 Part 2 only	4 Part 1 only 1 Part 2 only		
Pretoria . . . . .	—	6	0	6	0
Canada . . . . .	—	2	0	2	0
Sydney . . . . .	—	4	2	2	50

\*One candidate was not a British subject and took the Examination for the purpose of obtaining a certificate only.

SPECIAL EXAMINATION FOR FORMER CANDIDATES OF THE SOCIETY OF ARCHITECTS FOR ELECTION TO ASSOCIATESHIP.

	Examined.	Passed.	Relegated.
	2	2	0
SPECIAL EXAMINATION IN DESIGN FOR FORMER MEMBERS OF THE SOCIETY OF ARCHITECTS FOR ELECTION TO ASSOCIATESHIP.			
	Examined.	Passed.	Relegated.
	38	34	4

183 students have, therefore, been added to the Register during the year ending 28 February 1926, and 116 have received exemption from or passed the Final (or Special) Examination qualifying for the Associateship.

At the Examination for the R.I.B.A. Diploma in Town Planning, 3 candidates were examined, 1 passed and 2 were relegated.

At the Statutory Examination for candidature as District Surveyor in London, 2 candidates were examined and 1 passed.

At the Examination for Building Surveyors under Local Authorities, one candidate was examined and failed to pass.

The Council tender their grateful acknowledgments to the Examiners for their services.

*Attendance of Members.*—In view of the Reconstitution of the Board which took place during the beginning of the Session, it is not possible to present a statement of the number of attendances of Members of the Board.

## REPORT OF THE ART STANDING COMMITTEE

Nine meetings have been held since the publication of the last Annual Report. The attendance of members at the eight meetings of the Committee held during the Session 1925-1926 has been as follows :—

	No. of Attendances.		No. of Attendances.
Professor S. D. Adshead . . . . .	3	*Hon. H. A. Pakington . . . . .	7
Leonard H. Bucknell . . . . .	7	Halsey Ricardo . . . . .	4
Sir John J. Burnet . . . . .	2	H. J. Rowse . . . . .	2
*Heaton Comyn . . . . .	4	*Louis de Soissons . . . . .	4
E. Guy Dawber . . . . .	0	A. S. Soutar . . . . .	4
H. P. Burke Downing . . . . .	6	Walter Tapper . . . . .	7
R. A. Duncan . . . . .	5	Francis R. Taylor . . . . .	7
Cyril A. Farey . . . . .	4	W. Harding Thompson . . . . .	6
*H. S. Goodhart-Rendel . . . . .	2	Francis T. Verity . . . . .	3
*Frederick R. Hiorns . . . . .	2	Michael Waterhouse . . . . .	2
H. V. Lanchester . . . . .	1	Maurice E. Webb . . . . .	1
F. Winton Newman . . . . .	7		

\* Marked thus were appointed after first meeting of Committee. Possible attendances, 7.



The following officers were elected for the Session 1925-1926 :—Chairman, Mr. Walter Tapper ; Vice-Chairman, Mr. H. P. Burke Downing ; Hon. Secretaries, Mr. F. Winton Newman and Mr. Leonard H. Bucknell.

*Visits to Buildings.*—The programme arranged for Visits to Buildings during the Session included St. Paul's Cathedral, the Second Church of Christ Scientist, Bayswater, the Armenian Church, Kensington, the Devonshire House buildings, Messrs. Courtaulds' new premises, Chiswick House, and Stowe School. The thanks of the Committee are due to the Architects and proprietors of these buildings for the facilities afforded.

*Exhibitions.*—An exhibition of photographs and water-colours of the City Churches was arranged in June 1925 ; the opening ceremony was performed by Mr. J. C. Squire [*Hon. A.*] and attracted a very satisfactory attendance. The exhibition was designed to focus attention upon the danger with which the City Churches are threatened by the Measure of the Church of England Assembly.

An exhibition of Mural Painting and Decoration was arranged in April 1925 in connection with the series of Craft Lectures mentioned in the last Annual Report. The thanks of the Committee are due to Mr. J. D. Batten and the other exhibitors who lent work for the exhibition, and to the Society of Mural Decorators and Painters in Tempera which was responsible for the collection and hanging of the exhibits.

An exhibition illustrative of old and modern British and Continental Garden Design is being arranged and will be held during April 1926.

*Arterial Roads.*—In July 1925 a motor tour of inspection of the new Arterial Roads to the West and North of London was arranged jointly with the Town Planning Committee. A report of the tour and of the conclusions reached was prepared by Mr. W. Harding Thompson [*A.*] and has been published in the JOURNAL of the R.I.B.A.

*All Saints' Church, Northampton.*—Upon the advice of the Committee a protest was lodged against a proposal of the Local Authority to cut away the sides of the Churchyard of All Saints' Church, Northampton, in order to effect a street widening. The petition of the Local Authority was granted, but not in its entirety. A letter of thanks from the Bishop of Peterborough's Advisory Committee was received.

*The London Street Architecture Medal.*—At the request of the Council the Committee have examined the working of the Award of the London Street Architecture Medal in the light of the experience of the past four years. After consultation with the Jury entrusted with the award of the Medal it was decided to advise the Council that, for the purpose of future awards, buildings should be considered as a whole and not merely for their frontages as hitherto. The enlistment of municipal interest in the Medal was also recommended, and the Council were advised to add to the Jury of Award representatives of the London County Council, the City Corporation and the Metropolitan Boroughs. The Council have accepted the Committee's recommendations, which will therefore come into force at the end of the current year. The Award now about to be made for the year 1925 will not be affected.

*The Conservation of Ancient Monuments.*—The two pamphlets, known as "The Conservation of Ancient Monuments" and "Hints to Workmen engaged on the Repair and Restoration of Ancient Buildings" which were first issued in 1865 and revised in 1888, are now being revised by the Committee with a view to the results of modern experience in the treatment of old buildings being included. The Committee are receiving the assistance of the Society for the Protection of Ancient Buildings in the work of revision.

*R.I.B.A. Notice-Board.*—The Committee have arranged for the erection of a permanent Notice Board for the exhibition of posters and notices at the entrance to the R.I.B.A. premises from Conduit Street. A design has been specially prepared by Mr. Cyril A. Farey [*A.*], to whom the thanks of the Committee are due, and the new board will be ready shortly.

## REPORT OF THE LITERATURE STANDING COMMITTEE

Since the issue of the last report, the Literature Standing Committee has held 10 meetings.

The attendance of members at the eight meetings held during this Session has been as follows :—

No. of Attendances.		No. of Attendances.	
A. H. Moberly . . . . .	8	A. Trystan Edwards . . . . .	1
Sir A. Brumwell Thomas . . . . .	3	H. M. Fletcher . . . . .	3
C. E. Sayer . . . . .	8	D. Theodore Fyfe . . . . .	3
G. B. Tubbs . . . . .	6	A. E. Henderson . . . . .	6
Louis Ambler . . . . .	8	H. C. Hughes . . . . .	5
W. H. Ansell . . . . .	3	Ronald P. Jones . . . . .	2
H. C. Bradshaw . . . . .	3	Oswald P. Milne . . . . .	2
Prof. Lionel B. Budden . . . . .	1	Basil Oliver . . . . .	5
Miss I. M. Chambers . . . . .	3	C. S. Spooner . . . . .	5
C. Cowles-Voysey . . . . .	3	Arthur Stratton . . . . .	5
C. J. Dawson . . . . .	1	Lt.-Col. N. H. Waller . . . . .	1
F. C. Eden . . . . .	3	J. E. Yerbury . . . . .	6

The following officers were elected to serve during the Session :—Mr. A. H. Moberly, Chairman ; Sir A. Brumwell Thomas, Vice-Chairman ; Mr. C. E. Sayer and Mr. Graham B. Tubbs, Hon. Secretaries.

During the past Session the Committee has had several important matters under consideration.

At the request of the Council the Committee have drawn up for the Premises Committee a careful report containing a complete schedule of the accommodation of the existing Loan and Reference Libraries and of the accommodation and area recommended for future expansion, including accommodation for Drawings and Prints, Stack Room, Librarian's Room, Work Room and Strong Room. This report has been submitted to the Council.

The Committee have also had under consideration, in view of the growing increase of members using both the Loan and Reference Libraries, the larger amount of work thrown upon the staff, and have made recommendations in this matter to the Council.

The question of the present system of cataloguing has also been considered, and the Committee have recommended that as the present book catalogues do not permit adequate space for further additions, the card system should be adopted both for subject and author indexing.

The Cambridge School of Architecture having applied for the loan or gift of the James Whitelaw drawings which won the Soane Medallion in 1913 for the design of a Terminal Railway Station (six strainers), it was decided to recommend that these drawings should be offered as a gift to the School.

An application which was received from the National Book Council suggesting that the R.I.B.A. should provide for distribution amongst the members of the National Book Council a short bibliography of Architecture has been considered by the Committee who have compiled a bibliography of 61 books for the purpose.

An important addition to the Library has been due to the amalgamation of the R.I.B.A. and the Society of Architects, which placed the Library of the Society at the disposal of the Royal Institute. The Librarian selected from the Society's collection 776 volumes and 39 pamphlets, and although many of these were duplicates of volumes already possessed by the Institute, they will form a very valuable addition and materially increase the usefulness of both the Reference and Loan Collections. In addition to these volumes the Society's bookcases, which have been placed in one of the rooms on the second floor of the Institute, have materially assisted in providing necessary extra accommodation.

In regard to an enquiry from the R.I.B.A. Board of Architectural Education, the Committee carefully considered the question of providing useful text books on loan to the various schools of Architecture and came to the conclusion that this would be impracticable.

The principal donations received were :—

Two drawings attributed to Piranesi, presented by the late Mr. R. M. Young [F.].

Twelve original drawings made for the first edition of Rickman's Gothic architecture by T. Rickman, c. 1817; two original drawings made for the third edition by T. Rickman, c. 1825, and a volume of sketches by T. M. Rickman, presented by Miss Lynam.

A folio volume, Old Bridges of France, by William Emerson and Georges Gromort, with 24 reproductions in colour from the original watercolours by Pierre Vignal, presented by Professor William Emerson, F.A.I.A., Hon. Corr. M., R.I.B.A.

Five topographical volumes issued by the Ministry of Public Instruction, Rome, on Cagliari, Chieti, Macerata, Sassari and Spezia, presented by Commendatore E. Canziani.

The old Inns of Kent, by D. C. Maynard [A.], presented by the Author.

The Arts in Early England, volume 2, 2nd edition, by Professor G. Baldwin Brown, presented by the Author.



The Librarian reported to the Committee as follows:—

During the twelve months ending 31 March of the present year 296 volumes and 32 pamphlets have been added to the Library, exclusive of periodicals, reports, Transactions of Societies, and parts of works issued in serial form, and the Society of Architects' collection referred to in the Committee's Report.

The number of works presented was 47 volumes and 23 pamphlets, of which 14 volumes were added to the Loan Library.

Works purchased numbered 149 volumes and 9 pamphlets, of which 21 volumes were added to the Loan Library.

The attendance of readers in the Reference Library numbered 7,664.

The number of books issued on loan (including re-issues) was 6,930.

The number of tickets issued for admission to the Library other than to members of the Institute or to Students or Probationers was 163.

The number of books sent through the post was 763.

The principal acquisitions during the year (in addition to those mentioned in the Committee's report) were:

Ahlberg, *Modern Swedish Architecture*; Bartoli, *I Monumenti, Antichi di Roma, nei disegni degli Uffizi di Firenze*, 6 volumes; Blomfield, *The Touchstone of Architecture*; Bodington, *The Romance Churches of France*; Boerschmann, *Chinesische Architektur*; Bosanquet, *History of Aesthetic*; Briggs, *A Short History of the Building Crafts*; Bruce, *Grade School Buildings*; Byne and Stapley, *Provincial Houses of Spain*; Dahl, *Portals, Doorways and Windows of France*; Daubeny, *Cotswold Churches*; D'Espouy, *Fragments d'architecture du moyen age et de la Renaissance*, Volume 2; Dupeyard, *Le Palais-Royal de Paris*; Enlart, *L'art Gothique en France*, Volume 2; Gardner, *The Art of Greece*; Gatteschi, *Restauri de la Roma Imperiale*; Goodhue (Bertram), Monograph by Alexander Cram and others; Goodwin and Millikin, *French Provincial Architecture*; Hempel, *Borromini*; Ivekovic, *Dalmatiens Architektur und Plastik*, parts 6-8; Jackson, *Architecture*; James and Yerbury, *Modern English Homes and Interiors*; Kiessling, *Ostmarkbauten, Stadtebau in einer Mittelstadt*; Kent, *Life and Works of Baldassare Peruzzi*; Lanciani, *Wanderings through Ancient Roman Churches*; Lefol, *Hotels et Hoteleries*; Lethaby, *Westminster Abbey, Re-examined*; Lloyd, *History of English Brickwork*; Mieras and Yerbury, *Dutch Architecture of the XXth Century*; Newton, *The Work of Ernest Newton, R.A.*; Parent, *L'architecture des Pays Bas Meridionaux*; Pean, *Jardins de France* (2 volumes); Plantenga, *L'architecture Religieuse du Brabant au XVII<sup>e</sup> siècle (1598-1713)*; Pond, *The Meaning of Architecture*; Purdom, *The Building of Satellite Towns*; Richardson and Eberlein, *The English Inn*; Richardson and Eberlein, *The Smaller English House of the English Renaissance*; Rivoira, *Roman Architecture*; Robertson (Howard), *Architecture Explained*; Robertson (Manning), *Laymen and the New Architecture*; Royal Commission on Historical Monuments, *West London*; Roosval, *Stockholms Stadhus*; Shepherd and Jellicoe, *Italian Gardens of the Renaissance*; Stratton, *Elements of Form and Design in Classic Architecture*; Supino, *Jacopo dalla Quercia*; Tipping, *English Gardens*; Turner, *Architectural Practice and Procedure*; Waldram, *The Structural Design of Steel-framed Buildings*; Wren Society—Volume 2, *St. Paul's Cathedral*, original Wren drawings from the collection in the library of St. Paul's Cathedral; Yerbury, *The Lesser Known Architecture of Spain*.

A print of Jesus College, Oxford, by E. H. New, and an etching of Waterloo Bridge by the late Adrian Berrington, have been added to the collection.

## REPORT OF THE PRACTICE STANDING COMMITTEE

Since the publication of the last Annual Report the Committee have held 12 meetings.

The attendance of Members at the 10 meetings held during this Session has been as follows:—

W. H. Atkin-Berry . . . . .	10	G. H. Lovegrove . . . . .	8
F. Chatterton . . . . .	9	*T. R. Milburn . . . . .	1
Max Clarke . . . . .	9	*E. C. P. Monson . . . . .	5
J. W. Denington . . . . .	7	D. Barclay Niven . . . . .	6
G. Leonard Elkington . . . . .	7	A. Seymour Reeves . . . . .	8
H. V. Milnes Emerson . . . . .	6	J. Douglas Scott . . . . .	10
G. Hastwell Grayson . . . . .	7	W. Gillbee Scott . . . . .	6
W. H. Hamlyn . . . . .	9	J. C. S. Soutar . . . . .	9
P. W. Hubbard . . . . .	8	*A. J. Taylor . . . . .	2
Francis Jones . . . . .	1	*Harry Teather . . . . .	5
*Delissa Joseph . . . . .	7	Herbert A. Welch . . . . .	5
Arthur Keen . . . . .	5	Charles Woodward . . . . .	10

\* Marked thus were appointed after the first meeting of the Committee.

The following were elected the Officers of the Committee: Chairman, Mr. J. Douglas Scott; Vice-Chairman, Mr. Harry Teather; Hon. Secretaries, Mr. Charles Woodward and Mr. F. Chatterton.

The following Sub-Committees were appointed, the Officers of the Practice Standing Committee being *ex officio* Members of all Sub-Committees:—

(a) *Charges and Contracts*.—This Sub-Committee have held 8 meetings and the attendance of Members has been as follows:—

F. Chatterton . . . . .	7	Herbert A. Welch . . . . .	0
H. V. Milnes Emerson . . . . .	3	Max Clarke . . . . .	5
G. H. Lovegrove . . . . .	7	E. C. P. Monson . . . . .	7
J. Douglas Scott . . . . .	4	J. C. S. Soutar . . . . .	8
Harry Teather . . . . .	0	Charles Woodward . . . . .	3

Mr. E. C. P. Monson and Mr. G. H. Lovegrove were appointed Chairman and Hon. Secretary, respectively.

The most important matter being dealt with by the Sub-Committee is the question of Specialists' and Consultants' fees. It is still under discussion, but the Committee hope that a report will be made to the Council before the end of the present Session. The Sub-Committee met representatives of the Surveyors' Institution to discuss the revision of Ryde's Scale. The joint meeting were of opinion that the Scale was unsatisfactory in its present form, and should be revised. The Council of the Surveyors' Institution are considering the matter at present and the Committee await their views.

(b) *Professional Advertising*.—This Sub-Committee have held 3 meetings and the attendance of Members has been as follows :—

F. Chatterton . . . . .	1	G. Hastwell Grayson . . . . .	3
P. W. Hubbard . . . . .	2	Delissa Joseph . . . . .	3
Arthur Keen . . . . .	1	T. R. Milburn . . . . .	0
J. Douglas Scott . . . . .	3	Harry Teather . . . . .	2
Charles Woodward . . . . .	3		

The Sub-Committee prepared proposals for dealing with the question of interviews with architects and articles by them in the public Press. These proposals were approved by the Practice Committee. The Council, however, did not adopt them, as they felt that they were impossible of practical application.

The subject of Members' names on notice boards has also been under consideration. The Sub-Committee feel that it is not possible to standardise name boards, but on their recommendation the Practice Committee have advised the Council that ostentatious display can be dealt with under Clause 3 of the "Suggestions governing the Professional Conduct and Practice of Architects," and maximum sizes for lettering are suggested.

(c) *Parliamentary*.—This Sub-Committee have held 2 meetings and the attendance of Members has been as follows :—

F. Chatterton . . . . .	1	Delissa Joseph . . . . .	1
A. Seymour Reeves . . . . .	2	J. Douglas Scott . . . . .	2
W. Gillbee Scott . . . . .	2	Harry Teather . . . . .	1
Charles Woodward . . . . .	1		

The Sub-Committee, appointed to watch the interests of the profession in any fresh legislation that might be introduced have examined and reported on various Bills and Acts which contained clauses affecting the profession. Amongst other Bills, they have considered the L.C.C. General Powers Bill and on their recommendation the Council petitioned against the section of this Bill dealing with disused drains. It is understood that the London County Council have withdrawn this particular section. Where the provisions of certain Town Bills have only local application, the Allied Societies concerned have received the Committee's recommendations.

The draft code of bye-laws promulgated by the North-Western Branch of the Institution of Municipal and County Engineers has also been under consideration by the Sub-Committee, who have conferred on the matter with representatives of the National Federation of Building Trades' Employers.

(d) *Law of Ancient Lights*.—This Sub-Committee have held 3 meetings and the attendance of Members has been as follows :—

F. Chatterton . . . . .	1	Max Clarke . . . . .	0
Delissa Joseph . . . . .	3	Arthur Keen . . . . .	0
T. R. Milburn . . . . .	0	J. Douglas Scott . . . . .	3
Harry Teather . . . . .	0	Charles Woodward . . . . .	3

In accordance with the agreement arrived at with the Law Society, the Sub-Committee have met representatives of the Surveyors' Institution and have agreed proposals for the amendment of the Law of Ancient Lights and Easements based on acquisition of existing rights and the prevention of acquiring future rights. The Council of the Royal Institute have approved the proposals and the decision of the Council of the Surveyors' Institution is awaited. If this is favourable a Conference will then be convened with the Law Society and the representatives of the R.I.B.A. and the Surveyors' Institution with the view to the promotion of a Bill.

(e) *Officials and Private Practice*.—This Sub-Committee have held 2 meetings and the attendance of Members has been as follows :—

F. Chatterton . . . . .	0	J. W. Denington . . . . .	0
G. Leonard Elkington . . . . .	0	H. V. Milnes Emerson . . . . .	2
D. Barclay Niven . . . . .	2	A. Seymour Reeves . . . . .	2
J. Douglas Scott . . . . .	2	Harry Teather . . . . .	0
Charles Woodward . . . . .	1		



On the recommendation of the Practice Committee the Council authorised the sending of a letter to all Members and also Members of Allied Societies in Great Britain and Ireland asking for evidence of specific instances of whole-time officials undertaking private work. A large number of replies were received to this circular and were carefully scrutinised by the Sub-Committee. As a result of the evidence received, the Council have been recommended to write to every authority concerned, drawing their attention to the prevalence of this most undesirable practice and asking for their assistance in suppressing it. This recommendation has been approved by the Council and action will be taken on these lines.

(f) *Professional Defence Union.*—This Sub-Committee have held 6 meetings and the attendance of Members has been as follows :—

F. Chatterton . . . . .	4	Max Clarke . . . . .	2
D. Barclay Niven . . . . .	1	G. H. Lovegrove . . . . .	4
J. Douglas Scott . . . . .	6	W. Gillbee Scott . . . . .	5
Harry Teather . . . . .	0	Charles Woodward . . . . .	2

The Sub-Committee have produced a scheme for the formation of an Architects' Defence Union providing for indemnity against actions brought against its Members for negligence and for assistance in the recovery of fees in certain cases and for maintaining or defending actions for libel or slander and for infringement of copyright. Enquiries were made of several Insurance Companies and representatives were interviewed resulting in obtaining satisfactory terms and the submission of a provisional policy. The Committee's recommendations are now under consideration by the Council

*Exhibition Joint Committee.*—At the invitation of the Council, the Committee nominated the following members to serve on the Exhibition Joint Committee :—J. Douglas Scott, D. Barclay Niven F. Chatterton.

*Proposed Minimum Salaries for Architects' Assistants.*—At the request of the Council, the Committee conferred with representatives of the Association of Architects, Surveyors and Technical Assistants on the subject of minimum salaries for assistants, and after obtaining the views of the Allied Societies, reported to the Council.

*"The Architect and His Work."*—The pamphlet prepared by the Committee and edited by the late Mr. Paul Waterhouse has been published and numerous letters of congratulation on the result have been received. The pamphlet has had excellent Press notices and will, the Committee trust, prove of considerable service in educating the public as to the functions of the architect.

*Insurance of Clerks of Works.*—The Committee have considered the question of insuring the Clerk of Works by the Client and their recommendation on this subject was published in the JOURNAL on 19th December, 1925.

*Appointments in the East.*—On the recommendation of the Committee the Council have published a note in the JOURNAL warning Members to make careful enquiries into the adequacy of the salaries before accepting appointments under Governments in the East.

*Local Authorities and Housing.*—The Committee have had their attention drawn to several cases where local authorities have advertised for tenders and plans from contractors. Letters of protest have been addressed to the authorities with satisfactory results in some cases.

Other cases have occurred where local authorities have advertised for the services of architects for housing schemes asking them to quote their fees for the work. The authorities concerned have had letters of protest written to them and the Members in the locality have been warned to quote only the scale laid down for housing work.

*Local Authorities and Qualified Architects.*—The Committee have had their attention drawn to several cases where Sanitary Inspectors and Inspectors of Nuisances have been appointed by local authorities as architects for their housing schemes.

At the request of the Council, on the recommendation of the Committee, Sir Philip Pilditch, M.P., asked a question on the subject in the House of Commons. The question, together with the Minister's reply, was published in the JOURNAL of 20th March, 1926. The Chairman of the Practice Committee also addressed a letter to the public Press on the matter.

*Suspension of Members Under Bye-laws 24 and 25.*—The Committee have considered the alteration of the Bye-laws dealing with the suspension of Members with a view to strengthening the hands of the Council in dealing with cases of unprofessional conduct, and the Privy Council, on the recommendation of the General Body of Members, have approved the amendment of Bye-law 25 as suggested by the Committee.

*Architectural Copyright.*—The Committee particularly wish to draw the attention of Members to the case of Kenneth Dalglish *v.* the Sandown (Isle of Wight) Urban District Council, etc., as it is, they believe, the first case of Architectural Copyright brought under the Copyright Act of 1911. The Committee were consulted by Mr. Dalglish at the outset of the proceedings, and on their advice the Council were prepared to assist him both financially and otherwise in pursuing his claim. A report of the case was published in the JOURNAL of 20th March, 1926.

*Offers of Commission to Architects.*—Several trade circulars offering commission or discount to architects have again been brought to the notice of the Committee and successful protests have been made to the offending firms. The attention of the Bribery and Secret Commissions Prevention League was drawn to the case of the Yote Time Recorder Company, and they prosecuted the Company, who were fined by the Magistrates.

*Architects and Direct Labour.*—The Committee gave this matter very careful consideration, and their recommendations were approved by the Council and published in the JOURNAL of 6 March 1926.

*Salaried Appointments.*—On the recommendation of the Committee, the Council published a note in the JOURNAL advising Members that they should not apply for salaried public appointments unless the salary is fixed and stated in the announcement which invites applications.

*Circulation of Notices Regarding Professional Conduct and Practice.*—On the recommendation of the Committee the Council decided, having regard to the increased membership of the R.I.B.A. and of its Allied Societies, and the necessity for promoting uniformity of practice, to reprint all relevant notices published from time to time in the JOURNAL and forward copies periodically to Members, and also to maintain complete files of such notices for reference at the office of the R.I.B.A., and to request the Allied Societies to keep similar files at their headquarters.

The Committee have given advice and rulings to Members and others on the numerous inquiries received relating to matters of professional practice and to the appropriate fees for professional services, and in this connection they would recognise the excellent work of the Charges and Contracts Sub-Committee who have conducted the necessary investigations in such cases. The Committee again desire to emphasise the importance of architects acquainting their clients at the earliest possible opportunity with the R.I.B.A. Scale of Charges, as the Courts do not recognise the Scale as binding unless it has been brought to the client's notice before the charges have been incurred.

The Committee have also been called upon to deal with a large number of cases of alleged unprofessional conduct and breaches of professional etiquette, and after the most careful investigation have made the necessary recommendations to the Council.

In accordance with their established practice, the Committee decline to express opinions on *ex parte* statements or on matters that are *sub judice*.

## REPORT OF THE SCIENCE STANDING COMMITTEE

Since the publication of the last Annual Report the Committee have held 11 meetings. There has been an average attendance of 12 at each meeting during the present Session, and interest has been well maintained. The members of the Committee for the Session 1925-26 are :—

J. Ernest Franck, Chairman.  
Dr. Raymond Unwin, Vice-Chairman.  
Francis Hooper and  
Major Charles F. Skipper } Hon. Secretaries.

R. J. Angel.  
R. Stephen Ayling.  
Hope Bagenal, D.C.M.  
P. W. Barnett.  
T. P. Bennett.  
W. E. Vernon Crompton.  
W. R. Davidge.  
J. E. Dixon-Spain, O.B.E.  
E. Fiander Etchells.  
E. H. Evans.

Edwin Gunn.  
Lieut.-Col. P. A. Hopkins, O.B.E.  
G. N. Kent.  
R. G. Lovell.  
Edwin J. Sadgrove.  
Harvey R. Sayer.  
H. D. Searles-Wood.  
Prof. R. Elsey Smith.  
Digby L. Solomon.  
Percy J. Waldram.

The Committee record with sorrow the death during the Session of Mr. C. A. Daubney, who for many years gave ungrudgingly his time and knowledge to the work of the Institute.



As a result of the revision of the Bye-laws, the Chairman of the Committee became, *ex officio*, a member of the Council, and he was cordially congratulated on this appointment.

*Building Research Department.*—The policy of the Committee in this matter has been duly outlined in the previous Annual Report, and it is the aim of the Committee to keep in close touch with the Director of Building Research, Dr. R. E. Stradling, M.C., D.Sc., Ph.D., A.M.I.C.E., who has undertaken to carry out any special investigations which the Committee consider are in the interests of, and of assistance to, the members of the R.I.B.A. in their daily practice.

Dr. Stradling kindly attended a meeting of the Committee in December last, when he outlined the main divisions of the work on Building Research which his Department are now undertaking.

Firstly, dealing with general research, this is divided into four main divisions, which are again subdivided into 24 further component parts. At the same time these are all co-related so that the research on any one material is not confined to a specific purpose, for while that purpose is investigated at the same time the material is tested or analysed as to its behaviour for other services in its use as a building material.

There is likewise an Information Bureau, which is a free service to all interested, and is useful already, but will become more useful in proportion as its services are utilised by the members of the R.I.B.A.

In this connection Dr. Stradling would particularly welcome facilities from members for detailed investigations when troubles are encountered in practice.

The normal routine work of the professional consultant is not encroached upon, but special investigations within the scope of the Department's programme can be undertaken. For this work a fee is charged; but if the results are held freely available at the discretion of the Department, then the fee levied may be considerably less than the full economic cost.

The Committee would again remind members that in the Library is placed the index of Literature (both at Home and Abroad) which deals with every phase of the science and problems of building.

*British Engineering Standards Association.*—In February 1925 a Conference of the British Engineering Standards Association on Building Materials was held, at which were representatives of Professional Bodies, Government Departments, Local Authorities, Railway Companies, Building Trades Employers, and other federations of British industries.

The two representatives of the Institute were the late Mr. Charles A. Daubney, F.R.I.B.A., and Mr. Percival M. Fraser, F.R.I.B.A., who duly reported to the Committee that the Conference had unanimously decided to recommend that a Committee to deal with Building Materials should be set up, and this was duly submitted to the Main Committee of the B.E.S.A., who appointed a Building Materials Committee, with the definite function of standardising building materials.

The Science Standing Committee therefore recommended the Council to seek representation on the Committee dealing with Building Materials, in order that the views of members of the R.I.B.A. might be considered before any standard specifications were published, and Mr. Percival M. Fraser was appointed to represent the Institute on the Committee.

The Institute are further represented on the following new Committees :—

Sub-Committee on a Standard Specification for Grey and White Hydrated Limes, by Mr. Harvey R. Sayer.

Sub-Committee on Standardisation and Simplification with regard to Slates and Tiles, by Mr. Edwin Gunn.

Sub-Committee on Asphalt for Roofing, by Mr. Max Clarke.

Sub-Committee on Asbestos Cement Sheeting, by Mr. Percival M. Fraser.

Sub-Committee on Expanded Metal and Expanded Metal Lathing, by Mr. H. Haylock Golding.

Further activities of the B.E.S.A. in reference to Building Materials having been reported to the Science Standing Committee, it was resolved to suggest to the Council to ask for representation on the Main Committee.

In response to this request from the Council, it was arranged for a deputation from the Science Standing Committee to meet the Chairman, Sir Archibald Denny, Bart., and other members of the B.E.S.A. Main Committee.

At the interview it was pointed out that the B.E.S.A. were extending their Standard Specifications so as to comprise materials of particular interest to the architectural profession, and suggested that the Royal Institute of British Architects should be in a position to assist in the direction of the policy of the Main Committee.

Following upon that interview the Council of the R.I.B.A. were asked to nominate two members to the B.E.S.A. Main Committee, and Mr. Alan E. Munby and Mr. J. Ernest Franck have been invited to accept the appointment.

*Allied Societies.*—In the autumn of 1924 the Committee addressed to all the Allied Societies a circular letter, asking if they were conducting investigations into, or collecting information upon, any of the following subjects, or if they were in touch with any research work on these subjects by Universities or Technical Colleges in their respective areas or districts. The subjects were as follows :—

- (1) The Preservation of Timber.
- (2) The Preservation of Stone.
- (3) The Preservation of Metal.
- (4) Improvement of Glass for Pavement Lights.
- (5) Improvement of Painting (Internal and External).
- (6) Acoustics—in Public and Private Buildings.
- (7) Regulations as to Lead Mains by Water Companies.
- (8) Jointless Floorings, etc., and their Composition.

Some of the Allied Societies have responded with information respecting certain of these subjects, and it is hoped that these enquiries may stimulate the Allied Societies into further action in reference to scientific investigations upon these and other matters of interest to the general body of the profession.

*The Preservation of Stone.*—The Committee have carried on investigations on this subject extending over a considerable number of years, and for this purpose have had specimens of various building stones exposed on the roof of the Geological Museum.

An interim report has been published in the JOURNAL, and further work has been undertaken by circularising all the Diocesan Surveyors, asking for information as to the weathering qualities of the stonework in the buildings under their respective charge or supervision ; also as to any methods of preservation adopted by them in the treatment of the stonework.

The report in this matter received from Mr. Edward Warren, F.S.A., has been published in the JOURNAL for the information of members.

Mr. T. P. Bennett prepared a précis of the information contained in the replies received from the various Diocesan Surveyors, which report has been forwarded to the Secretary of the Stone Preservation Committee recently set up by the Government.

It is noted for the information of members that the Committee have received several reports which mention the deterioration of internal stonework from the use of coal gas either as an illuminant or for the purpose of heating the building. The Committee would draw the attention of the members to the report by Professor A. H. Church, F.R.S., on this subject. A copy of the report is in the Library.

*Storage of Imported Soft Woods.*—In this matter the Committee have proceeded on the lines indicated by the Chairman of the Docks and Warehouse Committee of the Port of London Authority, and have placed their views before the London (Soft Wood) Importers' Section of the London Chamber of Commerce.

It is hoped that their action may result in an improvement of the storage of imported timber at the Surrey Commercial Docks. This improvement is in the interests of the whole of the building community as well as the members of the Royal Institute of British Architects.

*Fire Prevention.*—The attention of the Committee was drawn to this important matter by Mr. Digby Solomon, who prepared a report on the subject dealing in detail with the encasing of steelwork in non-steel framed buildings ; the causes of fires in buildings, and the means of prevention ; the storage of celluloid, petrol, and other dangerous materials ; and first aid appliances. It is hoped that not only will further information be collected for the use of members, but that a paper will be read by a well-known expert on the subject before the general body at a meeting during the course of next Session.



*Research Laboratory at University College, London.*—Members attended a demonstration by Professor Coker on the use of prismatic rays for recording the stresses upon models of building structures. As a result a report has been published in the JOURNAL, with diagrams, and it is possible that the work which Professor Coker has initiated may be extended to other structural problems.

*Co-operation in Research Work by the Institute of Builders.*—At the invitation of the Council a deputation of leading members of the Institute of Builders attended a meeting of the Committee. The Chairman explained that the object of the Committee was to promote scientific research in connection with construction and building materials, together with their economic use. The deputation expressed the willingness of the Institute of Builders to give the Science Standing Committee any assistance in its power.

*Enquiries by Members.*—The Committee receive many letters from Architects and others asking opinions upon a variety of subjects.

The Committee gladly welcome communications which are of general interest to the profession, but cannot undertake to advise in those cases in which the normal course is to obtain the services of a professional consultant.

## REPORT OF THE ARCHITECTS' AND BUILDERS' CONSULTATION BOARD

The Board was established early in 1925 and consists of four architects and four builders appointed respectively by the R.I.B.A. and the National Federation of Building Trades Employers. Under its constitution the Board may consider and report upon matters which may be referred to it, such as questions which create or tend to create friction between the various organisations connected with the building industry; changes of policy, procedure or methods current in the industry; technical questions affecting the industry, such as the provision of a properly trained personnel and the allocation of classes of work so as to avoid demarcation disputes; the better selection of materials; and the consideration of Government legislative proposals with special reference to questions of production and cost.

During the period under review the architect members of the Board have been Major Harry Barnes (Chairman), Mr. Henry V. Ashley, Mr. Arthur Keen, Mr. Herbert A. Welch and Mr. Ian MacAlister (Secretary R.I.B.A.); the builder members have been Mr. W. H. Nicholls (Vice-Chairman), Mr. Henry Matthews, Sir Walter Lawrence (now replaced on resignation by Mr. Stephen Easten, O.B.E.), Mr. Henry T. Holloway and Mr. A. G. White (Secretary, National Federation of Building Trades Employers).

*Wages Slips on Tenders.*—The agreement reached in 1924 between the constituent bodies with reference to the addition to tenders of a slip providing for adjustments in the contract in the event of a rise or fall in wages was renewed for the 12 months ending 25 March 1926 by the Executives of both bodies upon the advice of the Board.

*The Contributory Pensions Act 1925.*—Upon the advice of the Board the Executives of the constituent bodies have announced to their members that an amount may be included as a separate item in Bills of Quantities to cover liabilities arising from the requirements of this Act in continuation of the existing practice with regard to other insurance provisions.

*Specialisation and its Effect on Craftsmanship.*—The Board have under consideration the growing tendency towards specialisation in the industry which, it is alleged, is having an adverse effect upon the apprenticeship system and upon the recruiting of craftsmen for the industry. It is agreed that an enquiry be undertaken.

*Tendering.*—Upon the request of the builder members of the Board, the Council of the R.I.B.A. were recommended to direct the attention of architects to the necessity for allowing sufficient time for the reparation of tenders.

*Industrial Relations between Employers and Operatives.*—It has been arranged that the Board shall be kept informed of the relations existing between the building employers and operatives from time to time and shall be given opportunities, should the need arise, for using their good offices in connection with disputes in the industry.

*Other Matters.*—Questions relating to the Standard Method of Measurement and to the amount of contracts for which Bills of Quantities should be supplied are now under consideration.

## REPORT OF THE COMPETITIONS COMMITTEE

Since the publication of the last Annual Report the Competitions Committee have met on *six* occasions. The attendance of members has been as follows :—

The President .. .. .	0	H. V. Lanchester .. .. .	4
The Hon. Secretary .. .. .	3	F. Winton Newman .. .. .	3
W. H. Ansell .. .. .	5	T. Taliesin Rees .. .. .	2
Henry V. Ashley .. .. .	6	J. Douglas Scott .. .. .	6
Hope Bagenal .. .. .	3	Sir A. Brumwell Thomas .. .. .	3
Major Harry Barnes .. .. .	1	Percy E. Thomas .. .. .	3
Leonard H. Bucknell .. .. .	2	Herbert A. Welch .. .. .	6
C. Cowles-Voysey .. .. .	3	W. G. Wilson .. .. .	5
G. Leonard Elkington .. .. .	3	Frank Woodward .. .. .	6
Arthur Keen .. .. .	2		

During the Session 1925-1926 the following have acted as the Officers of the Committee :—

Chairman : Mr. Herbert A. Welch [F.].

Vice-Chairman : Sir A. Brumwell Thomas [F.].

Honorary Secretaries : Mr. Henry V. Ashley [F.] and Mr. W. H. Ansell [F.].

During the period under review the Committee have dealt with 37 Competitions. This work has involved the scrutiny of conditions, negotiations with and the giving of advice to Promoters and Assessors, and the consideration of correspondence from competitors. It has been necessary to advise the Council to veto eleven Competitions owing to the refusal of the Promoters to observe the essential Clauses of the R.I.B.A. Regulations. In four cases negotiations with the Promoters have resulted in the amendment of conditions which were originally unsatisfactory and the Competition has been held with the approval of the R.I.B.A.

During the Session the Committee have considered the conditions of Competitions promoted in Australia, Egypt, South Africa, Russia and Bulgaria.

*Limited Competitions.*—It is within the recollection of members that when the Competition Regulations were revised in March 1924, provision was made that Limited Competitions should be subject to the Regulations in the same way as Open Competitions. Difficulties having arisen with regard to the effective administration of this rule, it has been necessary to consider whether the general body should be asked to sanction an amended Regulation providing for the control of Limited Competitions. During the past Session the Committee and the Council have given prolonged attention to this difficult question. The views of all the Allied Societies have been invited upon it, and proposals approved by the Council are to be submitted to the general body of members at an early date.

*The Conduct of Architectural Competitions and the Constitution of the Committee.*—The Committee have had under consideration questions relating generally to the conduct of Competitions and the constitution of the Committee itself. A detailed report setting out the procedure hitherto adopted by the Committee and suggesting certain modifications in such procedure for the future was submitted to the Council and approved. Resulting from this report the Council have published a statement calling the attention of Assessors, Competitors and Architects generally to certain important points in the conduct of Competitions.

The statement in question is as follows :—

(A) ALL ASSESSORS ARE REMINDED—

1. That while the R.I.B.A. are prepared to advise them if necessary on the General Regulations governing the conduct of Competitions, the Assessor alone is responsible—

- (1) For the drafting and presentation of any particular set of Conditions and Instructions and Replies to competitors ;
- (2) and that the General Regulations are not infringed therein.

2. That inasmuch as their Awards will necessarily be final and binding on all parties, they must refrain from premiating any design—however high its architectural merit may be in their opinion—which contravenes any of the Conditions and Replies which they have themselves drawn up for observance by competitors, and thus avoid any ground for legitimate criticism of their Award after publication.

3. That accordingly the value and importance of drafting Conditions and replies to questions so as to leave the maximum latitude to competitors in the solution of the problem should not be overlooked.

(B) ALL COMPETITORS ARE REMINDED—

That their taking part in a Competition is a definite acceptance of the principle that the Award of the Assessor is final and binding on themselves as well as on the Promoters, and that any competitor who feels that he has real ground for dissatisfaction with an Assessor's Award should communicate with the President of the R.I.B.A.

(C) ALL ARCHITECTS (i.e., NON-COMPETITORS AS WELL AS COMPETITORS) ARE REMINDED—

That any discussion or correspondence in the public or professional Press, tending to criticism or disparagement of an Assessor or Award, cannot alter the final and binding effect of that Award, but may prejudice Architects and the whole Competition System in the opinion of the public, and is, therefore, highly undesirable.



## REPORT OF THE LONDON BUILDING ACTS COMMITTEE

The Committee has held seven meetings, at which the average attendance has been six members. The individual attendances have been as follows :

The President . . . . .	0	Joseph, Delissa . . . . .	6
The Hon. Secretary . . . . .	0	Keen, Arthur . . . . .	0
*Daubney, C. A. . . . .	2	Pite, Professor Beresford . . . . .	0
Davidge, W. R. . . . .	1	Searles-Wood, H. D. . . . .	7
Dawson, Matt. . . . .	3	Solomon, Digby L. . . . .	7
Elkington, G. Leonard . . . . .	0	Tanner, Sir Henry . . . . .	7
Hunt, W. G. . . . .	4	Unwin, Dr. Raymond . . . . .	1
Jones, W. Campbell . . . . .	2	White, W. Henry . . . . .	4

\*Deceased, 13 Dec. '25.

In December 1925 the Committee sustained a very serious loss in the death of its Honorary Secretary, Mr. C. A. Daubney, the District Surveyor for Bermondsey. Mr. Daubney was one of the original members of the Committee, and was appointed Honorary Secretary in 1923. Mr. Daubney gave an immense amount of time to the work of the Committee, and any results which the Committee may achieve will be very largely due to his labours. Mr. Digby L. Solomon has been appointed to act as Honorary Secretary *pro tem.*) until the end of the present session.

As this is the first annual report of the present Committee, it may be of interest briefly to record the history of the Building Acts Committee.

The Committee was originally appointed by the Council in July 1922 to consider the question of Higher Buildings in London, and was reorganised in July 1923, when its reference was enlarged "to consider the Reform of the London Building Acts," and since then the Committee has been re-appointed each year by the Council. Mr. Searles-Wood was elected Chairman of the Committee on its reorganisation and has been re-elected Chairman each year.

The Committee discharged its original reference as regards the 1894 London Building Act in April 1924, its conclusions being printed in the issue of the R.I.B.A. JOURNAL dated 7 June 1924 ; and it will be remembered that its late Honorary Secretary read a paper on the subject in that month.

Subsequently, it considered the reform of the 1909 Act (that dealing with steel frame buildings and reinforced concrete), and has formulated its recommendations.

During the present session it has considered and reported on the proposed London County Council New Reinforced Concrete Regulations, and nominated its Chairman and late Honorary Secretary (the latter since succeeded by Mr. W. H. White) as its delegates to a joint Conference of the four statutory bodies who have to consider the draft proposals made by the L.C.C. for Reinforced Concrete Regulations.

It is contemplated that a Conference will shortly be held by this Committee with the Building Acts Committee of the L.C.C., when they will lay before the L.C.C. Committee the recommendations under the various Acts which they have already submitted to the R.I.B.A. Council.

It has also, during the present session, given consideration to the report and recommendations made by the Superintending Architect to the London County Council (Mr. G. Topham Forrest) on his recent American tour on the construction and control of buildings in the United States, and has furnished a report thereon to the Council.

Matters of interest from a Building Act point of view occurring in the regular printed minutes of the L.C.C.'s fortnightly meetings are discussed at each meeting of the Committee ; and the Committee also gives consideration to questions laid before its meetings by members on points under the Building Acts occurring in actual practice, which it is hoped to place on record for future reference.

As before mentioned, the Committee has been reappointed each year by the Council, and its members venture to suggest that in view of the many varied and important matters under the London Building Act and its Amendments Acts which occur from time to time, and especially in view of the fresh legislation thereon now intended by the L.C.C., they should remain in session as a permanent Committee, so as to be in an immediate position to deal with all matters of interest arising therefrom.

## REPORT OF THE TOWN PLANNING AND HOUSING COMMITTEE

Chairman : Sir Aston Webb, G.C.V.O., C.B., R.A.

Vice-Chairmen : Edward P. Warren, Professor S. D. Adshead.

Joint Hon. Secretaries : W. R. Davidge, W. Harding Thompson.

Since the publication of the last Annual Report, the Committee have held 4 meetings, and the attendance of the members of the Committee has been as follows :—

No. of Attendances.				No. of Attendance			
*The President	..	..	0	H. V. Lanchester	..	..	0
*The Hon. Secretary	..	..	1	*T. Alwyn Lloyd	..	..	1
Prof. Patrick Abercrombie	..	..	0	Sir Henry Maybury	..	..	0
Prof. S. D. Adshead	..	..	1	*E. C. P. Monson	..	..	2
Sir Reginald Blomfield	..	..	0	D. Barclay Niven	..	..	4
L. H. Bucknell	..	..	1	Prof. Beresford Pite	..	..	0
*Arthur Crow	..	..	2	*Manning Robertson	..	..	2
W. R. Davidge	..	..	4	W. H. Seth-Smith	..	..	1
F. M. Elgood	..	..	1	Herbert Shepherd	..	..	2
P. M. Fraser	..	..	2	*W. Harding Thompson	..	..	3
*W. Alexander Harvey	..	..	1	Dr. Raymond Unwin	..	..	2
William Haywood	..	..	1	*C. F. Ward	..	..	1
*C. H. James	..	..	2	Edward P. Warren	..	..	3
Arthur Keen	..	..	0	Sir Aston Webb	..	..	0

\* Possible attendances of Members thus marked, 3.

*London Squares and Open Spaces.*—The serious question of the encroachment on London squares and open spaces due to building operations has been discussed at length by the Committee ; the threatened loss of Endsleigh Gardens, the Foundling Hospital Estate and Holland Park having made the situation more acute. After consultation with representatives of the London Society and the Metropolitan Public Gardens Association, a report was prepared by the Committee formulating a policy for the preservation of London squares for the public ; this report has been approved by the Council.

*Arterial Roads.*—The Report of the Art and Town Planning Committees, resulting from a tour of the new arterial roads West and North of London on 18 July 1925, was approved and published in the R.I.B.A. JOURNAL. Arrangements are being made to visit other areas in and around London where new arterial roads are in process of construction with a view to collecting data and preparing a further report.

*Twickenham Amenities.*—On the recommendation of the Committee, the Council sent letters of protest to the Richmond Borough Council, the Twickenham Urban District Council, the Thames Valley Joint Town Planning Committee and the Kew Gardens Authorities expressing concern at the threatened disfigurement of the river side owing to the establishment of factories on the river frontage. The Committee is now in communication with the Twickenham U.D.C., who are taking all means possible to avert the destruction of their local amenities, but their powers in this respect are largely determined by their financial resources.

*Progress of Town Planning Schemes.*—In view of the fact that concise information has, up to the present not been available at the R.I.B.A. with regard to the progress of Town Planning schemes throughout the country, the Committee has arranged for an up-to-date schedule of Town Planning schemes in England and Wales to be placed in the Library for reference, and the attention of members has been directed to this information by means of a note in the JOURNAL.

*Re-planning of East London.*—The Committee have given their attention to the proposals of the Ministry of Transport for a new road to the Victoria Docks at Canning Town, and to those schemes of the Stepney Borough Council for a new and improved service of roads from Beckton Road to Whitechapel Road. As these proposals form but a part of the much greater problem of replanning the whole of London the Committee have taken no immediate action, but it is proposed to consider the whole matter exhaustively with a view to co-operation with the Town Planning Authority concerned.



## REPORT OF THE REGISTRATION COMMITTEE

After the Committee meeting in March 1925 the Secretary, Mr. McArthur Butler, was incapacitated for a long period by illness, but is now happily recovered. Since then progress has been made with the work in hand. The suggestion that the R.I.B.A. Council should urge members of the Institute to use their new title of "Chartered Architect" more freely has been adopted, and the members were duly notified by circular and by a notice in the Institute Journal. It is understood that many members of the Institute have expressed their approval of the proposal.

Communications on registration from Singapore and South Africa have been received, and visits from the Chairman, Secretary and other members of the Union of South Africa Registration Committee have given first-hand information in regard to the working of the Transvaal Registration Act, which it is hoped to extend to cover the whole of the Union of South Africa.

When necessary, communications have been sent to the professional press in elucidation of points raised by correspondents.

The Council of the Institute having given authority for the Committee to submit a draft Bill for Counsel's opinion and to incur the necessary expense in connection therewith, a Bill has been drafted and is in the hands of the Institute Solicitors for consideration by Counsel. When this has been completed the Committee will submit the final draft to the Council of the R.I.B.A.

## REPORT OF THE HONORARY AUDITORS

The Income for the year 1925 amounts to £24,586 2s. 7d., as compared with the Income for the year 1924 of £23,191 13s. 1d.

Increases have occurred in the items of Examination Fees, Entrance Fees, Journal Advertisements and Sale of Publications, and a decrease in Subscriptions and Contributions.

The Expenditure for the year 1925 amounts to £25,277 3s. 3d., as against £21,952 for 1924.

This expenditure has resulted in a deficit of £691, which gives a misleading idea as to the true financial position of the Institute. Owing to the terms of the amalgamation agreement, the Members of the Society of Architects became Members of the Institute early in the year, but Subscriptions in respect of these Members did not become due to the Institute until the year 1926. Thus the whole of the increased cost due to this great increase in Membership, together with the expense of carrying out the transfer, fell upon the Institute funds. The subscriptions of these Members were paid to the Society, and, of course, the Institute eventually obtained the benefit of a large proportion of these subscriptions when the whole of the remaining assets of the Society were handed over to the Institute, but as the handing over could not take place until the New Year, owing to legal formalities, this item cannot be shown in the 1925 accounts, as a set-off against the increased expenditure.

Moreover, in anticipation of the large increase in income which began on 1 January, 1926, the Council decided to anticipate certain improvements which were considered to be long overdue. The increased cost of these, therefore, fell in the year 1925. It will be seen that the item "Salaries and Gratuities" has consequently risen from £5,943 7s. 3d. to £7,116 9s.; the cost of "General Printing, Stationery, Camps and Petty Expenses" has risen from £2,070 18s. 5d. to £2,712 7s. 1d.; the item "Pensions and Compensation," mainly due to the amalgamation of the Society, amounts to £1,332.

In addition, during the course of the year there were a number of heavy items of expenditure of non-recurring nature. The grant of £30 to the Approved Society was a final grant to remove a deficit caused by War conditions. The special grant of £100 to the Architectural Association is a non-recurring item. The £100 given to the Durham Castle Fund and the 100 Guineas to the St. Paul's Fund are both non-recurring items. The legal costs of £392 in connection with the amalgamation and the New Charter and Bye-laws are, of course, exceptional, as is also the expenditure of £255 on the International Congress on Architectural Education, and the £195 on the Institute Soirée.

Taking all these exceptional items into consideration, it will be seen that on a normal basis the finances of the year would have been very satisfactory, and but for these exceptional items there would have been a very substantial surplus.

The very efficient manner in which the accounts are kept and all other matters are dealt with in connection with the finances of the Institute, call for particular notice, and are an indication of the high efficiency of the Staff.

A. HAROLD GOSLETT [F.]

F. J. TOOP [A.]

Honorary Auditors.

March, 1926.

## Income and Expenditure Account of Ordinary Funds for the Year ending 31st December 1925.

Dr.				Exclusive of Subscriptions in advance.				INCOME.				Cr.			
EXPENDITURE.															
To ORDINARY EXPENDITURE—				£ s. d.				BY ORDINARY INCOME—				£ s. d.			
Rent .....	87	6	10					Subscriptions and Contributions:—							
Rates and Taxes .....	1079	1	3					Fellows .....				4940 5 0			
Interest on Mortgage .....	1200	0	0					Fellows, Arrears .....				209 14 0			
				2366 8 1				Associates .....				6517 14 9			
Gas and Electric Lighting .....				193 1 7				Associates, Arrears .....				512 12 0			
Fuel .....				83 7 6				Licentiates .....				2474 14 0			
Salaries and Gratuities .....				7116 9 0				Licentiates, Arrears .....				256 6 0			
Pensions and Compensation .....				1332 14 6				Reinstated Members .....				49 7 0			
General Printing, Stationery, Stamps and Petty Expenses .....				2712 7 1				Students' Fees and Arrears .....				200 11 0			
General Meetings and Exhibitions .....				438 18 3				Subscribers .....				6 6 0			
Housekeeping and Wages .....				467 16 10				Entrance Fees .....				15167 9 9			
Advertisements .....				58 11 6				JOURNAL and KALENDAR—				768 12 0			
Examiners' and Invigilators' Fees .....				313 19 0				Advertisements .....				1262 2 6			
General Repairs .....				313 19 1				Sales of Journal and other Publications .....				2188 9 1			
Fire Insurance .....				84 18 6								3450 11 7			
Medals and Prizes .....				160 8 8				Examination and other Fees—							
Grants—								Probationers' Registration .....				1755 12 0			
Architects' Benevolent Society .....	100	0	0					Intermediate Examination .....				965 9 6			
Architects' and Surveyors' Approved Society .....	30	0	0					Licentiates' Examination .....				345 9 0			
Architectural Association .....	100	0	0					Final Examination .....				915 12 0			
Do. Special Grant .....	100	0	0					Town Planning Examination .....				5 5 0			
Bribery and Secret Commission Prevention League .....	10	10	0					Statutory Examination .....				9 9 0			
British Engineering Standards Association .....	5	0	0					Special War Examination and Exemption .....				8 8 0			
British Non-Ferrous Metals' Research Association .....	15	0	0									4005 4 6			
British School at Rome .....	100	0	0					Use of Rooms—							
British School at Rome, Faculty of Archaeology .....	3	3	0					R.I.B.A. Tenants and others .....				1078 0 0			
Durham Castle Repair Fund .....	100	0	0					Galleries .....				109 6 6			
Franco-British Union .....	20	0	0									1187 6 6			
Royal British Colonial Society of Artists .....	12	12	0					Grissell Legacy—							
Royal West of England Academy School of Architecture .....	50	0	0					Interest on War Loan .....				6 18 3			
St. Paul's Cathedral Restoration Fund .....	105	0	0					Deficit for the year .....				691 0 8			
Library .....				751 5 0											
JOURNAL—				356 14 4											
Reporting .....	55	13	0												
Printing and Binding .....	2358	19	2												
Illustrations .....	182	8	4												
Postages and Carriage .....	1414	17	11	4011 18 5											
KALENDAR—															
Printing .....	565	15	6												
Postage and Carriage .....	124	6	11	600 2 5											
				754 14 9											
*Contributions to Allied Societies .....															
MISCELLANEOUS EXPENSES—															
Amalgamation—New Charter and Bye-Laws .....	392	6	4												
Annual Dinner .....	113	12	5												
Annual Election Enumerators .....	33	12	0												
Architects' and Builders' Joint Board .....	18	10	5												
British Architects' Conference—Newcastle .....	389	15	5												
Burlington Devonshire Collection of Photographs presented to American Institute of Architects .....	28	0	0												
Burlington Devonshire Collection Catalogue .....	15	15	0												
Council Dinner Guests .....	181	5	0												
Enquiry re Public Officials and Private Works .....	50	6	1												
International Congress on Architectural Education .....	255	10	9												
Legal and Accountants .....	67	0	9												
Memorial Service—Late Paul Waterhouse .....	16	2	0												
Overseas Examinations .....	65	1	9												
Past-President's Portrait .....	210	0	0												
Presidents of Allied Societies .....	111	5	7												
R.I.B.A. Soirée .....	195	5	6												
R.I.B.A. Visiting Board .....	59	9	11												
Rome Scholarship Examination .....	49	9	5												
Staff Insurance .....	186	17	3												
Sundries .....	353	11	0												
Telephone .....	64	12	9												
Travelling Expenses of Examiners .....	73	16	8												
Do. President .....	29	3	6												
Do. Provincial .....															
Members of Council .....	101	19	3	3062 8 9											
Annual Charge for fine payable at Renewal of Lease .....				7 0 0											
SAFFERY, SONS & Co., Chartered Accountants.				£25277 3 3											
												£25277 3 3			

Examined with the vouchers and found to be correct. 24th March, 1926. { A. HAROLD GOSLETT [F.] } Hon. Auditors.  
F. J. TOOP [A]



## Revenue Accounts of Trust Funds for the Year ending 31st December 1925.

Dr.	£ s. d.		Cr.	£ s. d.
<b>ASHPITEL PRIZE FUND:—</b>				
To Prize awarded to G. R. Barnsley [A.]	10 0 0	By Balance from last Account	47 18 6	
To Income Tax paid on Untaxed Interest	0 15 6	By Dividends and Interest received	19 1 11	
To Balance carried forward	56 4 11			
	67 0 5			67 0 5
<b>ANDERSON AND WEBB FUND:—</b>				
To Purchase of £725 London Midland and Scottish Railway 4 per cent. Guaranteed Stock	599 1 1	By Balance from last Account	598 16 2	
To R.I.B.A. Scholarships at Cambridge University School of Architecture, R. F. Henniker	35 0 0	By Dividends and Interest received	54 10 8	
Ditto, C. D. G. Nicholson	35 0 0	By Balance carried forward	18 11 3	
To Income Tax on Untaxed Interest	2 17 0			
	671 18 1			671 18 1
<b>ARTHUR CATES LEGACY:—</b>				
To Income Tax paid on Untaxed Interest	0 6 0	By Balance from last Account	52 17 9	
To Balance carried forward	106 2 9	By Dividends and Interest received	53 11 0	
	106 8 9			106 8 9
<b>ARCHIBALD DAWNAY BEQUEST:—</b>				
To Purchase of £483 6s. 8d. London Midland and Scottish Railway 4 per cent. Guaranteed Stock	399 7 5	By Balance from last Account	400 14 7	
To Amount paid to A. C. Todd	10 0 0	By Dividends and Interest received	237 7 9	
To Amount paid to G. A. Burnett	10 0 0			
To Amount paid to A. E. Cameron [A.]	16 0 0			
To Amount paid to J. Breakwell	50 0 0			
To Amount paid to W. R. Brinton	33 0 0			
To Amount paid to R. P. Cummings	33 0 0			
To Amount paid to R. W. Donaldson [A.]	17 0 0			
To Balance carried forward	69 14 11			
	638 2 4			638 2 4
<b>DONALDSON TESTIMONIAL FUND:—</b>				
To Balance from last Account	0 14 3	By Dividends and Interest received	2 14 0	
To Cost of Medal	1 15 0			
To Balance carried forward	0 4 9			
	2 14 0			2 14 0
<b>GODWIN BURSARY:—</b>				
To Amount paid to L. H. Bucknell [A.]	43 10 0	By Balance from last Account	14 19 6	
To Cost of Medal	2 9 3	By Dividends and Interest received	35 0 2	
To Income Tax paid on Untaxed Interest	1 11 6			
To Balance carried forward	2 8 11			
	49 19 8			49 19 8
<b>GRISSELL LEGACY:—</b>				
To Balance from last Account	6 3 0	By Dividends and Interest received	14 17 8	
To Amount paid to A. E. Cameron [A.]	50 0 0	By Balance carried forward	48 9 10	
To Cost of Medal	7 4 6			
	63 7 6			63 7 6
<b>OWEN JONES STUDENTSHIP:—</b>				
To Purchase of £241 13s. 4d. London Midland and Scottish Railway 4 per cent. Guaranteed Stock	199 13 9	By Balance from last Account	247 9 10	
To Amount paid to Miss L. Payne	66 0 0	By Dividends and Interest received	120 4 5	
To Amount paid to J. H. Sexton	34 0 0			
To Income Tax paid on Untaxed Interest	2 4 6			
To Balance carried forward	65 16 0			
	367 14 3			367 14 3
<b>PUGN MEMORIAL FUND:—</b>				
To Amount paid to D. H. McMorran	50 0 0	By Balance from last Account	48 12 11	
To Amount paid to E. H. H. Williams (Special Prize)	10 0 0	By Dividends and Interest received	39 5 2	
To Cost of Medal	2 7 3			
To Income Tax on Untaxed Interest	1 4 6			
To Balance carried forward	24 6 4			
	87 18 1			87 18 1
<b>SAXON SNELL BEQUEST:—</b>				
To Income Tax paid on Untaxed Interest	2 11 0	By Balance from last Account	94 0 10	
To Balance carried forward	122 5 11	By Dividends and Interest received	30 16 1	
	124 16 11			124 16 11
<b>TITE LEGACY FUND:—</b>				
To Balance from last Account	60 9 6	By Dividends and Interest received	28 7 10	
To Income Tax on Untaxed Interest	1 13 6	By Balance carried forward	33 15 2	
	62 3 0			62 3 0
<b>WIMPERIS BEQUEST:—</b>				
To Amount paid to L. H. Bucknell [A.]	43 10 0	By Balance from last Account	29 19 4	
To Income Tax on Untaxed Interest	6 11 6	By Dividends and Interest received	36 17 9	
To Balance carried forward	16 15 7			
	66 17 1			66 17 1
<b>HERBERT BAKER SCHOLARSHIP FUND:—</b>				
To Amount paid to J. A. Hoogterp	62 10 0	By Balance as last Account	62 10 0	
	62 10 0			62 10 0
<b>HENRY JARVIS STUDENTSHIP ACCOUNT:—</b>				
To Amount paid to British School at Rome for M. A. Sisson, 1924 Student	125 0 0	By Balance from last Account	47 1 0	
To Amount paid to British School at Rome for E. Williams [A.], 1923 Student	125 0 0	By Amount received from Trustees	250 0 0	
To Balance carried forward	47 1 0			
	297 1 0			297 1 0
<b>HENRY JARVIS EX-SERVICE TRAVELLING SCHOLARSHIPS ACCOUNT:—</b>				
To Amount paid to 6 Students	150 0 0	By Amount received from Trustees	150 0 0	
	150 0 0			150 0 0

SAFFERY, SONS & Co.,  
Chartered Accountants.

Examined with the vouchers and found to be correct, 24th March, 1926. { A. HAROLD GOSLETT [F.] } Hon. Auditors.  
{ F. J. TOOP [A.] }

## Balance Sheet of Trust Funds, 31st December 1925

Dr.	Value 31st December, 1925.			Cr.
	£ s. d.	£ s. d.		£ s. d.
<b>To ASHPITEL PRIZE FUND:—</b>				
Capital—£305 1s. 8d. New South Wales 6% Inscribed Stock, 1930/40 .....	311 3 7		By Government and other Securities, being total of Trust Funds invested, as valued 31st December 1925 .....	18139 14 10
<i>Revenue Investments—</i>			By Cash at Bank On Current Account .....	410 4 10
£76 8s. 11d. 4½% War Loan, 1925/45....	72 12 5			
£20 5% War Loan, 1929/47 .....	20 2 0			
£10 5% National War Bonds, 1928 .....	10 10 6			
£20 4% Funding Loan, 1960/90 .....	17 2 0			
Balance at credit of Revenue Account.....	56 4 11	487 15 5		
<b>To ANDERSON AND WEBB FUND (Board of Architectural Education):—</b>				
Capital—£594 18s. 4d. New South Wales 6% Inscribed Stock, 1930/40 .....	606 16 4			
£58 6s. New South Wales 4% Inscribed Stock, 1924/62 .....	47 16 0			
<i>Revenue Investments—</i>				
£132 15s. 3d. 4½% War Loan, 1925/45 ..	126 2 5			
£65 5% War Loan, 1929/47 .....	65 6 5			
£25 4% National War Bonds, 1927 .....	24 17 6			
£10 5% National War Bonds, 1927 .....	10 10 6			
£30 4% Funding Loan, 1960/90 .....	25 13 0			
£725 London Midland & Scottish Rly. 4% Guaranteed Stock .....	572 15 0			
	1479 17 2			
Balance at Debit of Revenue Account....	18 11 3	1461 5 11		
<b>To ARTHUR GATES LEGACY FUND:—</b>				
Capital—London and North Eastern Rail- way—				
£580 4% 1st Preference Stock .....	394 8 0			
£580 4% 2nd Guaranteed Stock .....	423 8 0			
<i>Revenue Investments—</i>				
£137 18s. 7d. 4½% War Loan, 1925/45 ..	131 0 8			
£50 4s. 11d. 5% War Loan, 1929/47 .....	50 9 9			
£100 5% National War Bonds, 1927, 1928 and 1929 .....	105 1 0			
£200 13s. 10d. 4% Funding Loan, 1960/90	171 11 10			
Balance at credit of Revenue Account.....	106 2 9	1382 2 0		
<b>To ARCHIBALD DAWNAY BEQUEST:—</b>				
Capital—£11,026 17s. 9d. 2½% Consols ...	6064 15 9			
<i>Revenue Investments—</i>				
£544 19s. 7d. 2½% Consols .....	299 14 11			
£483 6s. 8d. London Midland & Scottish Rly. 4% Guaranteed Stock .....	381 16 7			
Balance at credit of Revenue Account.....	69 14 11	6816 2 2		
<b>To DONALDSON TESTIMONIAL FUND:—</b>				
Capital—£72 London Midland and Scottish Railway 4% Preference Stock .....	53 5 7			
<i>Revenue Investments—</i>				
£12 4s. 7d. 4½% War Loan, 1925/45 .....	11 12 2			
Balance at credit of Revenue Account ...	4 9	65 2 6		
<b>To GODWIN BURSARY FUND:—</b>				
Capital—£1,030 London Midland and Scottish Railway 4% Debenture Stock..	834 6 0			
<i>Revenue Investments—</i>				
£25 5% War Loan, 1929/47 .....	25 2 6			
50 War Savings Certificates .....	50 0 0			
£40 5% National War Bonds, 1927/28 ..	42 2 0			
Balance at credit of Revenue Account.....	2 8 11	953 19 5		
<b>To GRISSELL LEGACY FUND:—</b>				
Capital—£20 0s. 8d. "B" Annuity G.I.P. Railway .....	380 12 6			
<i>Revenue Investments—</i>				
£20 7s. 8d. 4½% War Loan, 1925/45 ....	19 7 3			
£20 5% War Loan, 1929/47 .....	20 2 0			
£30 5% National War Bonds, 1928/29 ..	31 10 6			
	451 12 3			
Balance at debit of Revenue Account.....	48 9 10	403 2 5		
<b>To OWEN JONES STUDENTSHIP FUND:—</b>				
Capital—£1,330 London Midland and Scottish Railway 4% Debenture Stock	1077 6 0			
£1,247 Great Western Railway 5% Con- solidated Guaranteed Stock .....	1228 5 10			
<i>Revenue Investments—</i>				
£398 16s. 8d. 4½% War Loan, 1925/45 ..	378 17 10			
£44 6s. 4½% War Loan, 1925/45 .....	42 1 7			
£107 9s. 6d. 5% War Loan .....	108 0 0			
50 War Savings Certificates .....	50 0 0			
£40 5% National War Bonds, 1927/28 ..	42 2 0			
£75 4% National War Bonds, 1927/28 ..	74 12 6			
£241 13s. 4d. London Midland & Scottish Railway 4% Guaranteed Stock .....	190 18 4			
Balance at credit of Revenue Account.....	65 16 0	3258 0 1		
Carried forward ..	£14827 9 11		Carried forward ..	£18549 19 8



Examined with the vouchers and found to be correct. 24th March, 1926 { A. HAROLD GOSLETT [F.] } Hon. Auditors.  
F. J. TOOP [A.] }

A. HAROLD GOSLETT [F.]  
F. J. TOOP [A.]

Rough Estimate of Expenditure and Income of Ordinary Funds for the year ending 31 December 1926:—Compared with the actual Expenditure and Income for 1925.

EXPENDITURE				INCOME			
	1925.			1925.			
	£	s. d.		£	s. d.		1926.
							£ s. d.
1. PREMISES—							
Rent, Rates, Taxes, etc. .. ..	2366	8 1		2700	0 0	1. Subscriptions and Arrears .. ..	15167 9 9
28, Bedford Square .. ..				400 0 0		2. Entrance Fees .. ..	768 12 0
Gas and Electric Lighting .. ..	193	1 7		265 0 0		3. Sale of Publications .. ..	2188 9 1
Fuel .. ..	83	7 6		120 0 0		4. Advertisements .. ..	1262 2 6
Repairs .. ..	313	19 1		400 0 0		5. Examination Fees .. ..	4005 4 6
Fire Insurance .. ..	84	18 6		100 0 0		6. Rent and Use of Rooms .. ..	1187 6 6
Fine on Lease .. ..	7	0 0		7 0 0		7. Interest on Investments .. ..	6 18 3
Housekeeping and Wages .. ..	462	16 10		560 0 0			
Telephone .. ..	64	12 9		80 0 0		Total .. ..	24586 2 7
Total .. ..	3581	4 4		4632 0 0			31230 0 0
2. ADMINISTRATION—							
Salaries and Gratuities .. ..	7116	9 0		7200 0 0			
Pensions and Compensation .. ..	1332	14 6		1113 0 0			
Staff Insurance .. ..	186	17 3		250 0 0			
General Printing, Stationery, Stamps and Petty Expenses .. ..	2712	7 1		2700 0 0			
Annual Election Enumerators .. ..	33	12 0		35 0 0			
Total .. ..	11381	19 10		11298 0 0			
3. PUBLICATIONS—							
JOURNAL .. ..	4011	18 5		4000 0 0			
KALENDAR .. ..	690	2 5		830 0 0			
Total .. ..	4702	0 10		4830 0 0			
4. LIBRARY—							
Library .. ..	356	14 4		360 0 0			
Special Grant .. ..				100 0 0			
Total .. ..	356	14 4		460 0 0			
5. TRAVELLING EXPENSES—							
R.I.B.A. Visiting Board .. ..	59	9 11		150 0 0			
Provincial Members .. ..	101	19 3		1200 0 0			
Presidents of Allied Societies .. ..	111	5 7					
Examinations .. ..	73	16 8					
Total .. ..	346	11 5		1350 0 0			
6. GENERAL MEETINGS AND CONFERENCES—							
General Meetings and Exhibitions .. ..	438	18 3		600 0 0			
Annual Conference and Dinner .. ..	503	7 10		800 0 0			
Council Dinner Guests .. ..	181	5 0		150 0 0			
Advertisements .. ..	58	11 6		60 0 0			
Total .. ..	1182	2 7		1610 0 0			
7. EXAMINATIONS AND PRIZES—							
Examiners' Fees .. ..	313	19 0		465 0 0			
Medals and Prizes .. ..	160	8 8		600 0 0			
Rome Scholarships .. ..	49	9 5		68 0 0			
Examinations (Overseas) .. ..	65	1 9		80 0 0			
Total .. ..	588	18 10		1213 0 0			
8. CONTRIBUTIONS TO ALLIED SOCIETIES—							
Total .. ..	754	14 9		2250 0 0			
9. GRANTS—							
Total .. ..	751	5 0		600 0 0			
10. SUNDRIES—							
Total .. ..	401	4 11		500 0 0			
11. PROVISIONAL SUMS—							
Registration .. ..				500 0 0			
Legal and Accountants .. ..	67	0 9		350 0 0			
Total .. ..	67	0 9		850 0 0			
12. NON-RECURRING SUMS—							
Book of Proceedings .. ..	255	10 9		520 0 0			
Amalgamation .. ..	392	6 4					
Burlington Devonshire Collection Catalogue .. ..	15	15 0					
Ditto Photographs .. ..	28	0 0					
Enquiry re Public Officials and Private Work .. ..	50	6 1					
Memorial Service late Paul Waterhouse .. ..	16	2 0					
Past President's Portrait .. ..	210	0 0					
R.I.B.A. Soirée .. ..	195	5 6					
Total .. ..	1163	5 8		520 0 0			
GRAND TOTAL .. ..	25277	3 3		30113 0 0			
				EXPENDITURE .. ..	25277 3 3	30113 0 0	
				Deficit .. ..	691 0 8		
				Balance .. ..		1117 0 0	



## The Safety of the City Churches

THE UNION OF BENEFICES AND DISPOSAL OF CHURCHES (METROPOLIS) MEASURE

BY ARTHUR KEEN, VICE-PRESIDENT

THE production by the National Assembly of the Church of England of the measure bearing the above title has resulted in some remarkably well-drafted protests. The Address sent in 1923 by the City Churches Preservation Society to the members of the National Assembly and the one addressed to the Archbishop of Canterbury by Sir Aston Webb on behalf of a conference of societies convened by the Royal Academy were models of well-grounded, clearly reasoned opposition, and following these protests the Corporation of the City of London has sent to the Ecclesiastical Committee of Parliament a document that, in its turn, is a model of lucid, definite statement and of close and accurate reasoning. It is worthy of study on its own account as an example of the effectiveness of moderate language used in simple sentences. Every paragraph is lucidly expressed, and the objections offered to the Bill are based on such reasonable grounds that this petition should prove one of the most forcible attacks that the measure has to face.

The central part of the argument is that the measure is *ultra vires* the National Assembly; that the Assembly was set up for the particular purpose of dealing with matters that concern, and concern only, the Church of England and its members, and that questions involving the rights and interests of persons having no representation in the National Assembly, many of them not members of the Church at all, are outside its scope. It is pointed out that the National Assembly is placed in a more favourable position in relation to legislation on matters entrusted to it than any other constituted body in the kingdom. It is enabled to pass measures for the regulation of Church affairs which may have legislative force without going through the ordinary procedure of the Houses of Parliament, and the conferring of such powers for any purposes outside domestic matters affecting the Church of England would be unconstitutional, and was in fact far from being the intention of Parliament.

Early in the text of the Petition attention is called to the grounds upon which the measure is based—briefly, that the churches are little used, and that there is an urgent need in the suburbs for additional churches, and that the money derived from the sale of the City churches should provide funds for suburban churches.

All of these grounds, it is pointed out, are highly controversial, and are based on conclusions that are not capable of satisfactory proof. It is impossible to forecast the attitude of Parliament towards the matter, but either of these two technical objections ought to be fatal to the Bill. If it is *ultra vires* the matter is at an end; if it rests on assumptions of a highly controversial kind it ought not to be passed without full discussion, and such discussion is not admissible.

A great deal has been made of the "safeguards" that are provided for in the Bill; the fact is that these safeguards are altogether illusory, and that nothing in the way of an impartial tribunal is proposed. The definite purpose of the Bill is to secure the sale of churches, and effective safeguards are the last thing in the minds of the promoters of it.

It seems a strange thing that in this matter of our City churches it is left mainly to laymen to insist on the spiritual and sentimental aspects of the question, while the clergy are taking the materialistic view. The lure of money is a very subtle thing, but it should not be difficult for members of the National Assembly to realise that fifty churches used with resource and insight might be none too many to meet the needs of a day population of nearly half a million of people concentrated in the narrow space of the City. To throw up the churches because they are not much wanted on Sunday is merely the confession of failure, the indication of lack of vision; and to sacrifice the evidences of the history, religious and social, of the chief City of the Empire is in this instance a betrayal of trust.

The safety of most things depends on appreciation, and unfortunately the clergy, broadly speaking, are still in the gothic revival stage of culture. In the course of a few years they may have advanced; but in the meanwhile these churches, which are among the best productions of the Renaissance in England, are in great danger.

It appears that the Lord Mayor of London is the only person having the right to attend personally at the Bar of the House of Commons in order to appeal against the passing of any Bill, and it is intended that the right shall be exercised in the present instance, unless the action of the House of Lords makes an appeal to the Commons unnecessary.

## Bertram Grosvenor Goodhue

EXHIBITION OF WORK AT THE ARCHITECTURAL ASSOCIATION

BY HOWARD ROBERTSON [F.], S.A.D.G.

The work of Goodhue is pervaded by the spirit of romance, and to a higher degree than that of any American architect among his contemporaries. He revelled in schemes and projects, in designs of pure phantasy, and was personally happier in his dream creations than when fettered by clients and restrictions. A book of his, *Architectural and Decorative Drawings*, published in 1914, largely through the devoted efforts of his office staff, reveals him at his best in creating fairy-tale villages in Bohemia and long white imaginary villas in Italian settings. But this is not to deny his achievement in executed buildings.

The present exhibition of his work is faintly disappointing, because it does greater honour to the draughtsman than the constructor; there are too few photographs, and they are insufficiently representative, while attention is distracted by the beauty and sparkle of penwork and the low-toned wash perspectives which sometimes mingle three techniques with an effect of breadth and simplicity which haughtily disdains the meretricious. The San Diego Exhibition, the Californian houses, and some of Goodhue's most attractive work in the East are absent, and the photographs are rarely equal to the good work of this kind to which we in England have become accustomed in recent years; unfortunately also the title-ing of the exhibits is scanty and there are rarely dates which would help to distinguish the various stages of the designer's artistic development.

Few visitors to the Exhibition will agree with those who hold that Goodhue's death was a timely one from the point of view of his work—that he had passed his zenith and was losing his creative powers. His Nebraska State Capitol, and a design which he submitted for the Tribune competition, show that, on the contrary, his design was increasing in strength and was discarding those little mannerisms which were interesting in their relation to contemporary American work but which in this country would be counted as of small import. For Goodhue has passed through various phases as through various partnership associations, and his work reflects influences varying from Norman Shaw and English Gothic to Spanish Baroque and eventually reveals (in the Nebraska Capitol) more than a flavour of Central European developments.

One feels that in the plastered walls, tiled floors, and bare wooden beams of his individual Spanish-Italian renderings he is thoroughly at home. That in his stone houses he is regretting the absence of the slates and masonry which are the real soul of his English prototypes, and that with Gothic he is revelling in the mystery and romance of Shafts and Tracery rather than in the essential vitality of Gothic structure. St. Thomas' on Fifth Avenue, and the Chapel of the Intercession in New York, are both a little unconvincing—the one flashy and brilliant, the other a little hard and unsympathetic.

His small churches, such as St. Mark's at the fashionable Mount Kisco, are charming, and many of his houses, too, such as the snug little dwelling at Scarborough with

its tight-fitting roof and blank wall surfaces of field stone. And in the richness of Spanish and Plateresque, so foreign to the Anglo-Saxon temperament, he is completely and even riotously in his element.

As a draughtsman this exhibition will only serve to enhance his already splendid reputation. He was always unpretentious on this score, and never classed himself with such men as Joseph Pennell, F. L. Griggs, and Herbert Railton; but his smallest notebook sketches reveal the artist born.

Perhaps this Exhibition of Goodhue's drawings will influence our own Royal Academy draughtsmanship. The wish is father to the thought.

## Correspondence

### THE PUBLIC APPRECIATION OF ARCHITECTURE.

346 Strand, London, W.C.2.

22 March 1926.

*The Editor*, JOURNAL R.I.B.A.—

SIR,—It has long been felt by all those interested in the Arts that, whereas painting, literature, sculpture and music are the subjects of exposition and criticism, the master-art of Architecture is commonly neglected. Architects are a modest folk, and they do not even initial their works; moreover, it is not the custom to invite criticism even of public buildings; although the community, as such, is concerned with them in a larger degree than obtains with regard to other works of art. In order to stimulate interest in Architecture and to attempt to educate public taste I propose to publish in the *Morning Post* from time to time a description and an appreciation, written by an architect of high reputation, of a new building of public interest and a photograph.

The conditions I would suggest are: that the architect of a new building should send to me an invitation to review his work, together with a brief description and a drawing or photograph of it.

I propose to carry out this experiment on very modest lines at the outset, and only buildings of sufficient public importance can be noticed.—Yours, etc.,

THE EDITOR OF THE *Morning Post*.

### THE ROYAL GOLD MEDAL FOR ARCHITECTURE.

Intimation has been received that His Majesty the King has approved the award of the Royal Gold Medal to Professor Ragnar Ostberg (Honorary Corresponding Member of the R.I.B.A.), of Stockholm, in recognition of the merit of his executed work. The Medal will be presented to Professor Ragnar Ostberg at the Banquet of the R.I.B.A. on 17 June.



## The Building Trades Exhibition

BY JOHN E. YERBURY [L.].

Mr. Montgomery is to be congratulated upon the successful opening of this Exhibition on Wednesday, 14 April. His continued efforts to organise, in a thoroughly businesslike manner, the exhibition of everything connected with the building trade have been appreciated for a long time, and each year adds to his laurels.

Architects, as represented by the R.I.B.A., have given proof of their appreciation of Mr. Montgomery's work, by conferring the honour of Honorary Associateship upon him—an honour not lightly bestowed. Mr. Guy Dawber, 11 President, took the chair on Wednesday morning at the opening ceremony, which was performed by the Lord Mayor of London, himself intimately connected with the building industry; while Sir Kingsley Wood (Parliamentary Secretary of the Ministry of Health) was present to express the interest of the Government in the Exhibition.

The luncheon was a great success, and Lord Saye and Sele, in proposing the health of Mr. Montgomery, said with truth that, in organising the Building Trade Exhibitions during the last thirty years, Mr. Montgomery had rendered a great service to the industry and to the community. In reply, our host was as entertaining as his organisation he has been effective.

One new feature this year is the prize offered by the promoters for the best essay by a student on "My Impressions of the Building Exhibition of 1926," with Mr. Guy Dawber, Mr. Goodhart-Rendel and Mr. J. C. Quire as judges. Particulars may be obtained of Mr. Montgomery, 43 Essex Street, Strand, W.C.2.

The general arrangements of the Exhibition are similar to those of previous years and, on the whole, there is general improvement, which should assure the greatest success from every point of view. It is, I think, an entirely new idea to exhibit complete cottages, on the lines of the Ideal Homes Exhibition, instead of confining the Exhibition to individual firms showing only their own products.

It is now possible to form some opinion upon the comparative advantages and disadvantages of various materials as used in building construction of small cottages. Without expressing any opinion upon the merits or demerits of the plans, it cannot be denied that brick and stone are the natural and most beautiful materials for cottage building. Although concrete may be used with great effect, and timber with some economy, few would choose to use them in preference to brick and stone, except in special circumstances and under unusual conditions.

I do not myself think that different methods of construction, the use of new material and standardisation, will enable us to build cottages which can be let at commercial rentals, such as are within the means of the poorer paid workers under present wage conditions. Each of these methods may help a little to lessen the cost, and, all working together, they will make a considerable difference; but it will still be necessary to find cheap capital and to create better output before the real housing question is touched.

From the point of view of the architect and the builder, there is something to be said in favour of giving thought to the use of timber and concrete, but as architect or builder, it is very difficult to see what we can say in favour of steel houses; yet, as citizens, and especially as members of the community, keenly interested in the housing question, and as social reformers, we must consider steel houses and their possibilities as an aid to a settlement of a most important question.

It is not necessary, in this Journal, to call attention to the exhibits of brick and timber cottages, nor need I do more than remind readers that the many uses of concrete are adequately displayed, with various methods of construction. The Novocrete Pavilion will probably have drawn attention to itself and to the material of which it is constructed.

It remains then only to make particular reference to the steel house shown by Messrs. Stephen and Son, Ltd., of Govan, shipbuilders. This house is constructed on the principle of the ship's deck house, and built by the men in the shipbuilding yard, who would otherwise be out of work, and is known as the "Reith Steel House."

If circumstances compel us to accept steel houses, the Reith compares favourably with the Weir house, which appears to have given so much satisfaction to the present Government, and should be considered by those who are forced by circumstances to forgo the beautiful to obtain a substantial and comfortable house for those who cannot afford beauty. The Reith house is constructionally sound, easily and quickly erected and economically maintained, and, if it can be provided at a cost which ensures "letting" at commercial rentals, will undoubtedly find a market. I think there are possibilities of improving the appearance without adding to the cost.

The architect in search of new materials, or the latest labour-saving devices, will find much of interest at the Exhibition; and those architects who do not care to specify particular manufacturers' goods unless necessary will be convinced, I think, that goods or material supplied by first-class firms are equally satisfactory, and they may safely leave contractors to deal with the firm which suits them best, except where circumstances require some speciality.

There is a first-rate show of builder's plant, concrete mixers, wood working and other builder's machinery; a fine display of marbles and timber; several firms exhibit made up joinery; and the very excellent demonstration of British manufacturers of paints, etc., decorative material, building accessories, furniture and fittings, is a certain proof that we can maintain our own in all those industries connected with the building trade.

People who are interested in building are enlightened upon all sorts and conditions of things affecting them and those for whom they cater in various ways. Representatives of local authorities, members of councils and committees, building owners, property holding companies, and the man who wants a house to live in, or a week-end cottage, all find something to interest them at Olympia and an answer to the questions they have to ask.

## Allied Societies

### ABERDEEN SOCIETY OF ARCHITECTS.

#### ABSTRACT FROM THE ANNUAL REPORT.

Since last Annual Meeting five meetings of the Council have been held.

The Annual Convention of the Incorporation of Architects in Scotland was held at Aberdeen, when there was a representative gathering of the members of the several chapters. At the business meeting, which was held on 19 June, Mr. Keppie delivered his Presidential address, in the course of which he reviewed the work of the Incorporation during the past year. The members and their friends dined together in the evening. The principal guest of the occasion was Dr. Thomas Ross, and among the other guests present were Mr. Gotch, President of the R.I.B.A., the Lord Provost and the Principal of the University. Facilities having been afforded by the respective proprietors, visits were paid on 20 June to Castle Fraser, Craigievar Castle and Crathes Castle, at each of which features of interest were inspected and discussed by the delegates.

The Council has kept in touch during the year with the Royal Institute, from whom communications were received on the following subjects among others: Examinations, membership, registration, competitions, prize drawings, workmen's compensation and insurance of clerks of works, civic societies, Building Research and the Architects and Builders' Consultation Board.

In regard to limited private competitions, the Chapter supported the Incorporation in their suggestion that modification of the regulations in such competitions, so far as Scotland is concerned, should be made by the Incorporation where they considered special circumstances existed instead of by the Royal Institute.

The Council, in common with other Chapters, made a contribution towards the testimonial to Mr. MacAlister as a mark of appreciation of his distinguished services as Secretary of the Royal Institute.

The Secretary to the Board of Architectural Education having intimated that the Board had decided to require students entering a course carrying exemption from the R.I.B.A. examinations to become registered as probationers R.I.B.A. before starting the second year of their course, the Council suggested that steps should be taken for having these requirements modified so far as Scotland is concerned, so to allow, as an alternative, registration as students of the Incorporation instead of as probationers of the Royal Institute; but this suggestion has not been acceded to by the Royal Institute.

At the request of the Governors of Robert Gordon's Technical College, Dr. Kelly has been re-appointed External Examiner in connection with the Architectural Department.

As usual, the volumes of the R.I.B.A. JOURNAL and the Quarterly of the Incorporation have been added to the Library. A copy of the Report of the International Congress on Architectural Education has also been placed in the Library.

On instructions received from the Royal Institute and the Incorporation the following competitions were banned:—

- (1) Carnegie Hall, Dingwall; and
- (2) Housing Scheme at Cupar, Fife.

One Fellow, Mr. A. B. Gardner; two Associates, Mr. Ian Moodie and Mr. James A. Davidson, and ten students have been admitted as members during the year.

The total membership of the Chapter is now 25 Fellows, 8 Associates and 21 students.

### THE BERKSHIRE SOCIETY OF ARCHITECTS.

The Sixth Annual Meeting of the Berkshire Society of Architects was held at Reading University on Friday evening, 26 March, at which there was a good attendance of members and friends.

The Honorary Secretary's report made mention of a considerable amount of work done by the Society during the past year dealing with architectural education, architectural, professional, and local matters.

Public lectures on architectural subjects have been given in conjunction with the Workers Educational Association.

The Society consists of ninety-five members and eleven honorary members.

The following officers were elected for the year 1926:—

*Chairman*—J. G. T. West [F.].

*Vice-Chairman*—H. Hutt [F.].

*Hon. Librarian*—H. Whiteman Rising [F.].

*Hon. Treasurer*—W. R. Morris [L.].

*Hon. Secretaries*—C. B. Willcocks [F.], W. J. Freeman [L.].

*Hon. Auditors*—A. S. Cox, F.S.I. [L.], E. P. Morgan [L.].

Four Members—W. Galt Millar, F.S.I., J. T. Saunders F.R.I.B.A., W. R. Howell, F.R.I.B.A., S. E. Burrett, and the following members were nominated to represent the Society on the Council of the Berks, Bucks, and Oxon Architectural Association:—

E. P. Warren, F.S.A. [F.], W. Galt Millar, F.S.I., W. R. Howell [F.], F. H. Floyd [F.], H. Hutt [F.], C. B. Willcocks [F.], and H. W. Rogerson.

The prizes offered by the Berks Archæological Society for measured drawings of old buildings were awarded.

After the meeting a lecture was given by E. P. Warren, Esq. F.S.A., F.R.I.B.A., on "Ancient Crafts Guilds and their Workmanship." The lecture was illustrated by numerous lantern slides showing beautiful examples of craftsmanship in the thirteenth, fourteenth, and fifteenth centuries.

Attention was especially directed to the very fine work on the west front of Rheims Cathedral, which fortunately had not suffered from the German bombardment to the same extent as the rest of the building. The illustrations also included a simple and beautiful Cross in Herefordshire, an elaborate Font Cover in Suffolk, screens in Devonshire and many other examples in England, France, Alsace and Tyrol.

The lecturer gave a very interesting account of the rise and constitution and activities of the ancient Guilds and their relation to the Merchant Guilds, many of which still survive in name in the City Guilds and in other towns. The Merchant Guilds, which were very wealthy were distinct from the Craft Guilds. The latter consisted entirely of craftsmen and membership was only attained through the stages of apprentice journeyman and master craftsmen. Full membership could only be obtained on production of actual examples of executed work. A high level of skill was thus maintained. Protection and help were afforded to the members in their work and in arranging its value, and assistance was given to them or to their dependents in case of adversity.

Mr. Warren drew attention to the effect of the "Black Death" on the work of the guilds. This plague in the fourteenth century, which particularly affected Bristol, Norwich and London, swept away more than half the population of England and a large proportion of the master craftsmen. The work of the guilds had thus to be undertaken largely by the partially trained apprentices and journeymen, and a noticeable decline in the quality of the craft work in later periods can be observed.

### DEVON AND CORNWALL ARCHITECTURAL SOCIETY.

#### ABSTRACT FROM THE REPORT FOR THE YEAR 1925-26.

In presenting their Thirty-Sixth Report the Council are pleased to announce an increase in the numbers of the Society.

It is with deep regret that the Council record the loss sustained by the death of the late Mr. James Jerman, one of the first Presidents of the Society and an indefatigable worker in its interests.

The Council note with great pleasure that their President Mr. J. L. Fourace, has been appointed to represent the R.I.B.A.



a Member of the Court of Governors of the University College of the South-West. They also have pleasure in reporting the appointment of Mr. L. F. Tonar as representative of the Society on the Exeter Junior Technical Schools Advisory Committee, in place of the late Mr. James Jerman.

With reference to the Competition for the proposed Public Hall at Topsham, the Parish Council were approached through the R.I.B.A. and consented to the conditions being brought to line with those laid down by the Royal Institute.

The usual exhibitions of R.I.B.A. Prize Drawings were held at Exeter and Plymouth during September.

Two sets of drawings of measured work were submitted for the prize offered annually by the Society. Mr. J. R. Hillman, of Plymouth, was successful in this competition with a very excellent set of the Brett Monument in Mount Edgumbe Park, Plymouth.

A Design Club for members in Exeter and District has been inaugurated with the assistance of the Architectural Association. The preliminary meeting on December 8 1925, took the form of a General Meeting of the Society and was very largely attended. Mr. F. R. Yerbury, Secretary of the Architectural Association, and Mr. H. Robertson, Principal of the Architectural Association Schools, addressed the meeting, and lectures have been held continuously since that date. Mr. J. D. Gordon Hake, of the Bristol School of Architecture, has visited the club on three occasions and given very valuable criticisms of the work. The Council hope that the establishment of this club will prove a great step forward in the direction of architectural education.

The Society has also held four general meetings where discussions on the lines of those commenced last year have been continued. Mr. E. F. Hooper read a paper on the "Architect and the Speculative Builder," Mr. H. A. Peters, an interesting description of "Life in the Architectural Schools at Liverpool," and Mr. L. F. Tonar, reported on a suggestion by the R.I.B.A. as to the formation of a Civic Society.

At the Annual General Meeting, Mr. E. F. Hooper, R.I.B.A., of Exeter, was elected President for the ensuing year.

The following Officers and Committee were elected:—  
*Vice-Presidents*—Messrs. A. C. Norman and R. M. Challice.  
*1st President*—Mr. J. Leighton Fouracre. *Hon. Treasurer*—Mr. S. Dobell. *Hon. Auditor*—Mr. L. F. Tonar. *Hon. Secretary*—Mr. J. Challice.

*Members of Council*:—Messrs. P. Morris, J. Bennett, J. M. Thomasson, F. W. Beech, W. N. Couldrey, W. H. May, A. S. Parker, B. Priestly Shires, and W. A. Vercoe.

#### HAMPSHIRE AND ISLE OF WIGHT ASSOCIATION OF ARCHITECTS.

##### ABSTRACT FROM THE ANNUAL REPORT.

We now have 3 Honorary Members, 59 Fellows and 50 Associates—that is, a total membership of 112, or an increase of 38 over 1913.

In England and Wales the Institute has 16 Allied Societies, and it is interesting to compare the strength of our membership with that of the other 15 Societies. With our present membership we are about eleventh on the list. If expectations for the future are realised we can quite easily reach the sixth place, and it is hoped that every member of Association will help in this direction.

The Institute have suggested the desirability of our establishing an "Architects' and Builders' Consultation Board." We are sure you will all welcome the idea, calculated as it is to establish better and more friendly relations between those in charge of these two great branches of our work, not to mention in detail the many points of importance to both parties which could with advantage be jointly discussed and amicably settled. The builders are being approached upon this matter, and a further report, which it is hoped will be favourable, will be submitted to the Council in due course.

At the suggestion of the Institute, the formation of a "Science Standing Committee" is under consideration. At the present time there are no records of the nature, advantages, disadvantages or peculiarities of our local building materials, and the broad idea is that the collecting and recording of information of this kind should be undertaken by a suitable committee of our Society, who will have power to co-opt other useful members from outside our ranks. Our members generally will be invited to help by supplying information, whenever possible, and a students' prize for research work and an essay of a scientific nature based upon such research is to be included in our next programme of competitions.

The Institute Board of Architectural Education are in communication with us with regard to architectural education facilities in Hampshire and the Isle of Wight. The matter is being pursued, and a report will in due course be laid before the Council for full consideration.

The Council have decided to subscribe annually to The Architects' Benevolent Society. The object of the Society is to afford assistance to those in necessitous circumstances who have been engaged as architects or architects' assistants, their widows and children. The subscription we are paying will entitle our Council to recommend annually three applicants for relief. Last year the Society distributed £1,826 6s. in the form of grants and £440 in pensions. The Architects' Benevolent Society also deal with all classes of insurance, and policies for life, fire, motor cars and buildings in course of erection may be negotiated through the Architects' Benevolent Society.

#### NORTHERN ARCHITECTURAL ASSOCIATION.

##### SMOKING CONCERT, 19 MARCH 1926.

The President, Lt.-Col. G. Reavell, O.B.E., F.R.I.B.A., presided over a large attendance of members and friends, and opened the exhibition of drawings.

The drawings comprised the winning sets in the Design and Measured Drawings Competitions recently organised by the R.I.B.A., and open to students throughout the British Isles. Included among these is a set of particular interest locally, for the student awarded the Pugin Travelling Studentship for 1925 made his tour round the mediæval buildings in the counties of Northumberland and Durham, and the result is represented by a very large and excellent set of drawings, together with descriptive notes illustrating most of the mediæval buildings in this part of the country.

The drawings submitted for the Northern Architectural Association competitions were also on exhibition, and the assessors report in connection with these was read, giving the awards as follows:—

Glover Medal and Travelling Studentship. 25 guineas:

J. R. A. MACDONALD, A.R.I.B.A.

R.I.B.A. Final Examination Testimonies of Study. Book prize, 10 guineas:

S. C. PUNCHARD.

R.I.B.A. Intermediate Examination Testimonies of Study. Book prize, 10 guineas:

J. G. CLEMENTSON } Bracketed First.  
N. WILLIS }

Special prize awarded for rendered measured drawings of the main front of Newcastle Gaol, in view of its early demolition to Mr. R. N. KILPIN and Mr. C. C. BROWN.

#### SOUTH WALES INSTITUTE OF ARCHITECTS.

##### ANNUAL DINNER.

The annual dinner of the South Wales Institute of Architects was held at Cardiff on 25 March. The president (Mr. C. F. Ward [F.]) presided, and among those present were:—The Lord Mayor and Lady Mayoress of Cardiff (Alderman W. B. Francis, J.P., and Miss Dorothy Francis), the Mayor and Mayoress of Newport (Mr. Cyrus

T. Clissitt and Mrs. Clissitt), Major Harry Barnes, vice-president of the Royal Institute of British Architects; Sir William Seager, D.L., J.P., president of the Cardiff Chamber of Commerce; Councillor J. S. Johnson, chairman of the Newport Housing Committee; Mr. H. S. Rogers, president of the Berks, Bucks, and Oxon Architectural Association; Mr. Ian MacAlister, secretary R.I.B.A.; Mr. David Hannah, president of the South Wales Institute of Engineers; Mr. E. Rees Edwards, president of the South Wales Federation of Building Trades Employers; Major W. E. Lloyd, borough engineer of Newport; Mr. A. E. Jenkins, president of the Institute of Builders, South Wales Branch; Mr. F. J. Thomas, president of the Cardiff Master Builders' Federation; and Mr. E. W. King, F.I.O.B., senior vice-president of the National Federation of Building Trades Employers.

In proposing the toast of "The R.I.B.A. and the Allied Societies," the Lord Mayor of Cardiff said he was glad to know that the Royal Institute were, by means of an Act of Parliament which was now being sought, going to protect themselves against the ravages of the unqualified, which, to his knowledge, the profession had been subjected to in Cardiff.

In his response, Major Harry Barnes said all the members of the profession looked forward to the time when they would get more credit for the work they were doing. Cardiff, he continued, was a city, not only with great architecture of the past, but it was producing great architecture of the present. He hoped they would always keep the walls around Cardiff Castle.

The profession, emphasised Major Barnes, looked forward to a great future, and the strength of the Institute depended more and more on the strength of the Allied Societies. He was glad to be able to offer his congratulations to Cardiff on producing architects who could go up to the North of England and capture a big competition.

[Major Barnes referred to Messrs. Ivor Jones and Percy E. Thomas, Cardiff, who submitted the successful design in a competition for a new fire station at Newcastle.]

Mr. Ian MacAlister, who also replied, spoke of the regional planning that was being carried out in South Lancashire, and said he thought that a great regional plan should be launched for South Wales. He did not know of any area better fitted for it than South Wales which, with its coal areas and other industries, called out for a great consolidated scheme. A scheme of that kind would inevitably bring with it better housing conditions, fine development schemes for the cities, with the conservation of beauty wherever possible. He was confident that the architects of Wales would not be slow to follow the example of South Lancashire if regional planning were adopted.

Mr. C. T. Clissitt (Mayor of Newport), who, with Mr. Rees Edwards, in responding to the toast of the guests, said he realised what great services the architects of the county were rendering for the public good, and he hoped the architects would not give way to their principles under the present financial stringency. They should look forward to the time when it would again be possible for public authorities to erect public buildings that would delight every heart and be the admiration of every town.

Sir William Seager referred to the work that a committee did some years ago in making a regional planning survey of South Wales. He claimed they had produced one of the finest reports ever sent to Whitehall. Finance was not available to carry out their recommendations, but although disappointed, the committee still had met and he hoped that in the future some tangible results would arise from their deliberations.

The Annual General Meeting of the South Wales Institute of Architects (Central Branch) was held at the Institute Rooms on Tuesday, 9 March 1926.

The Honorary Treasurer's Report, showing that the Branch is in a healthy financial condition, was read and adopted.

The Honorary Secretary's Report, also adopted, indicated a useful year's work, including the giving of an excellent and well-attended series of lectures in conjunction with the South Wales Branch of the Institute of Builders, and also the holding of a very successful smoking concert.

During the year useful action has also been taken by the Central Branch with regard to the preservation and planting of trees and other items of local importance.

The following officers and members of the Executive Committee were duly elected:—

*Chairman*—H. Teather [F.].

*Honorary Treasurer*—H. Teather [F.].

*Honorary Secretary*—W. S. Purchon, M.A. [A.].

*Executive Committee*—T. Alwyn Lloyd [F.], Percy Thomas O.B.E. [F.], Ivor P. Jones [A.], J. B. Wride [L.], J. Williamson [A.].

*Associate Member*—E. B. Tyler.

*Student Member*—G. L. Price.

The following were elected as Members of the Council of the South Wales Institute of Architects:—

T. Alwyn Lloyd [F.]; J. B. Wride [L.]; W. S. Purchon, M.A. [A.]; J. Williamson [A.]; A. G. Lynham [A.]; J. Llewellyn Smith [L.]; Jacob Rees [L.]; Frank Heaven [A.]; A. G. Edwards [L.]; R. E. M. Coombes [A.]; J. L. Rees, A.R.S.I.; J. B. Fletcher; R. H. Winder, M.A. [A.]; C. H. Evans, L. Monroe, A. L. Priest, T. E. Llewellyn Associates' and Students' Representatives.

The meeting closed with a vote of thanks to Mr. T. Alwyn Lloyd for acting as chairman of the branch for the past two years.

## BERKS, BUCKS AND OXON ARCHITECTURAL ASSOCIATION.

### ANNUAL GENERAL MEETING.

The sixth annual general meeting of the Berks, Bucks and Oxon Architectural Association was held in the Election Hall, Eton College, on Saturday, 17 April, by kind invitation of the Provost, when the following were elected officers for the ensuing year:—

*President*.—Harold S. Rogers, M.A., F.S.A. [F.].

*Vice-Presidents*.—E. J. Dixon [A.] (Bucks), G. T. F. Gardner [L.] (Oxon), J. G. T. West [L.] (Berks).

*Hon. Auditor*.—R. A. Rix [A.].

*Hon. Treasurer*.—T. T. Cumming [F.].

*Hon. Secretary*.—R. F. Dodd [A.].

Mr. Harold S. Rogers delivered his Presidential address and amongst the business discussed was that of an exhibition of members' work, architectural lectures and competitions for student members.

There was a good attendance of members, who were afterwards conducted over the Provost's Lodge and other parts of the College.



## INSTITUTE OF ARCHITECTS OF NEW SOUTH WALES.

The Council of the Institute of Architects of New South Wales for 1926 has been elected as follows :

*President* : Alfred Samuel Hook. *Ex-President* : Sir Charles Jessenthal, F.R.I.B.A., C.M.G. *Vice-President* : Bertram Mes Waterhouse. *Vice-Chairman* : Arthur William Anderson, Henry Ebenezer Budden. *Honorary Treasurer* : James Middle. *Honorary Secretary* : John Herbert Hurst. *Honorary Assistant Secretary* : James Aubrey Kerr. *Members of Council* : Oscar Alexander Beattie, John L. Berry, William De Putron, George Herbert Godsell, Royston John Keith Harris, John Drummond Moore, Ronald Richardson, Otford Wilton Weston, Professor Leslie Wilkinson.

The annual report shows that much useful work has been done during the year, and concludes as follows :

The outstanding feature of the activities of the Institute during the year just closed has been the interest taken by the members of the late Architects' Association. The amalgamation has been more than in name, and the Institute now fully represents the profession in the State.

It is gratifying to note that public bodies, and the public generally, are more and more recognising the status of the Institute. On many occasions recently the President and Council have been consulted by public bodies, and the President has on several occasions officiated successfully as arbitrator in the settlement of disputes between client and architect and builder.

The year has been a busy one for the Council and the various committees. Members of the Institute generally have not, perhaps, been aware of the time that is devoted to the Institute and its affairs by those who act on the Council and Committees appointed from time to time.

Many new names have been added to the list of members and several new committees have recently been appointed, and a still busier year, with wider prospects and increased activities, is anticipated for 1926.

## NEW ZEALAND INSTITUTE OF ARCHITECTS.

Mr. S. Hurst Seager [F.], the well-known New Zealand architect, who has devoted so much time to the study of the lighting of picture galleries, after spending several years in Europe in connection with the New Zealand War Graves Commission, has recently returned to New Zealand. Since his arrival he has been unanimously elected President of the New Zealand Institute of Architects. In the course of his speech after his election Mr. Seager said that having now retired from active work he looked forward with very great pleasure to being able to devote the several branches of the Institute and become better acquainted with the members of the profession in all parts of the Dominion. The Government wished him to go to every part of New Zealand and show the people what had been done in the direction of erecting battlefield memorials to our soldiers on the various fighting fronts of the Great War ; and when he was going round in that way he would take every opportunity, he assured them, of stressing wherever he went the importance and urgency of town planning.

Mr. Seager's numerous friends in England will be delighted to hear of the honour conferred on him by his New Zealand confrères.

## LONDON BUILDING ACTS (AMENDMENT)

ACT, 1905—FIRST SCHEDULE.

### HOLLOW FLOORS AND HOLLOW ROOFS.

The London County Council on 2nd March passed the following resolution :

That the Council, in pursuance of the powers vested in it by the First Schedule (Part III) to the London Building Acts (Amendment) Act, 1905, do approve as fire-resisting hollow floors and hollow roofs constructed of steel filler joists in combination with hollow bricks and concrete, subject to the following conditions :—

(i) That all materials shall be to the satisfaction of the district surveyor, and the whole of the work shall be executed to his satisfaction.

(ii) That if any blocks are of clay they shall be thoroughly burnt, and be free from lime, cracks or other defects.

(iii) That the concrete used for filling in, either between, around or above the hollow bricks, shall be mixed in the proportions of at least one volume of Portland cement, two volumes of various sizes of clean siliceous sand and four volumes of hard broken brick, flint or stone of all the various sizes which will pass through a mesh of three-quarters of an inch measured in the clear.

(iv) That there shall be at least one inch of fire-resisting material (inclusive of plaster) below the lower flange of the steel filler joist and that all joints between hollow bricks shall be pointed in cement mortar.

(v) That there shall be at least one inch thickness of concrete or other fire-resisting material covering the upper flange of the steel filler joists.

(vi) That the steel joists shall receive one coat of rust-resisting paint.

(vii) That the sides and undersides of steel beams and girders (other than filler joists embedded in the thickness of the floor) shall be protected from the action of fire by fine tamped concrete at least two inches thick, or burnt clay tiles and cement plaster of an aggregate thickness of two inches, or fine concrete one and a half inches thick trowelled round suitable mesh reinforcement, and that in all cases the concrete shall be bedded solidly against the steel and there shall be no intervening cavity.

(viii) That fillets, strips and blocks of wood or other combustible materials shall not be embedded in the thickness of the fine concrete necessary to comply with any of these conditions.

(ix) That the thickness of the material above the void added to the thickness of the soffit (exclusive of any plaster) shall be not less than three inches.

(x) That the dimensions specified in the foregoing conditions shall refer only to questions of fire-resistance and resistance to impact during fires apart from any requirements in respect of imposed loads and working stresses under normal conditions of use.

Provided that this approval shall not in any way derogate from any of the powers of the Council, and shall not in any way affect the requirements of (1) the London County Council (General Powers) Act, 1908, with respect to cubical extent of buildings ; (2) the London County Council (General Powers) Act, 1909, with respect to the enclosure or encasing of pillars or girders with brickwork, terra cotta, stone, tiles or other incombustible materials ; and (3) the regulations made under the provisions of section 23 of the London County Council (General Powers) Act, 1909, with respect to the construction of buildings wholly or partly of reinforced concrete.

### PROPOSED FINE ART COMMISSION FOR SCOTLAND.

The question whether there should be a body in Scotland which would undertake similar duties to those which for the past few years have been discharged in England by the Royal Fine Art Commission was discussed at a Conference in Edinburgh on April 15. Sir John Gilmour, the Secretary for Scotland, heard the views of representatives of public authorities in Scotland, who were generally favourable to the proposal, which would involve the reference of questions relating to architecture, public monuments, town planning, and matters of artistic importance which related to the external amenities of a city, to an authoritative body.

The Earl of Crawford and Balcarres, Chairman of the Royal Fine Art Commission, Sir D. Y. Cameron, and Mr. H. C. Bradshaw, the Secretary of the Commission, were present at the Conference, which was held in private. Lord Crawford explained the work carried on by the Commission in England.

The local authorities were represented by Lord Provost Sleigh and Treasurer Guest, Edinburgh; Sir Henry Keith, Convention of Burghs; Mr. Jas. J. F. Johnstone, Town Clerk, Paisley; Lord Provost Lewis, Aberdeen; Bailie Frame, Dundee; and Bailie Welsh, Glasgow. There was some difference of opinion on the question of whether there should be a separate Commission for Scotland, or an enlargement of the English Commission and the extension of its area of operation to Scotland.

Sir John Gilmour said there were obviously difficult questions to be considered in connection with the constitution of such a body in Scotland. The matter would receive very careful attention.

### NATIONAL HOUSING AND TOWN PLANNING COUNCIL.

The National Housing and Town Planning Council has arranged to hold, as in previous years, a series of Regional Conferences with Local Authorities in different parts of England and Wales. The centres to be visited this year are London, Manchester, Leeds, Birmingham, Newcastle-upon-Tyne, Exeter, Southampton, Norwich and Cardiff. The agenda for the Conferences embraces many important subjects, including the administration of the Housing Acts, the maintenance of good standards of planning and design, the amelioration of slum areas, the rural housing problem and town and regional planning.

Full particulars may be obtained on application to the Council's offices, at 41 Russell Square, London, W.C.1.

### TO OLD MALVERNIAN ARCHITECTS.

It is proposed to erect a new College Shop in the school grounds. The Secretary of the Malvernian Society, the College, Malvern, from whom particulars may be obtained, will be glad to hear from any Old Malvernian architects who would be prepared to submit designs for the above.

### ARCHITECTS' BENEVOLENT SOCIETY. INSURANCE SCHEME.

It is not perhaps sufficiently realised by members that all kinds of insurances can be negotiated through the agency of the Architects' Benevolent Society. The following list of insurances which have been

effected recently gives an indication of the variety of the work that is being done:

Motor-cars, value £900, £400, £275, £110.

Building and contents of houses against fire and burglary, value £4,000, £3,000, £2,750, £1,200, £200.

Buildings in course of erection and alteration against fire, £19,200, £10,000, £1,100, £300.

Accident insurance, £1,000.

All risks, £200.

Life endowment and whole life, £1,000, £500, £200.

It is earnestly desired that all architects who are contemplating insurance in any form should communicate with the Secretary A.B.S., 9, Conduit Street W., who will give immediate attention to all enquiries.

### BOARD OF ARCHITECTURAL EDUCATION

#### R.I.B.A. PRIZES AND STUDENTSHIPS, 1926-1927.

The R.I.B.A. Prizes and Studentships Pamphlet for 1926-1927 has just been issued. It contains full information of the various Prizes and Studentships totalling in value nearly £2,000, together with the detailed programmes for the various competitions.

In the case of the Godwin Bursary and Wimperi Bequest, the attention of competitors is drawn to the fact that the value of the prize has been increased from £130 to £250.

The pamphlet also gives particulars of the London County Council Scholarships in Architecture and Building Construction.

Copies of the pamphlet are obtainable at the R.I.B.A. price 1s., exclusive of postage.

## Notices

### THE ANNUAL GENERAL MEETING, 3 MAY 1926.

The Ninety-second Annual General Meeting will be held on Monday, 3 May 1926, at 8 p.m., for the following purposes:—

To read the Minutes of the Ordinary General Meeting held on 19 April 1926; formally to admit members attending for the first time since their election or transfer.

To receive the annual report of the Council and Standing Committees for the official year 1925-26, printed on preceding pages of this issue. Copies of the report will be available for members at the meeting.

To nominate candidates (two members) for the office of Hon. Auditor for the ensuing year.

To receive the list of attendances at the Council and Standing Committees during the Session.

### BRITISH ARCHITECTS' CONFERENCE, LONDON, 1926.

The Annual Conference of British Architects will take place in London from 14 to 19 June (inclusive).

All members and students of the R.I.B.A., the Architectural Association, and the Allied Societies in Great Britain, Ireland, and Overseas are invited to take part in the Conference.

It is hoped that many ladies will be present, as guests of members, at all the events contained in the programme.

*Members are particularly requested to make a note*



the date (14 to 19 June), and to keep themselves free from other engagements.

A complete programme with full particulars will be issued in the near future to all the members of the bodies mentioned above.

*Non-London members are urgently recommended to make arrangements for their accommodation in London during the Conference week at the earliest possible time. In the height of the London season the hotels are liable to be very full.*

*Hospitality.*—The Executive Committee desire to remind London members of this welcome opportunity of offering private hospitality to their friends from the provinces, who will be coming up to London for the Conference week. So much generous hospitality has been extended in the past to London members attending the Conferences in the provincial centres that this opportunity of returning it will no doubt be warmly welcomed and members will lose no time in writing to their friends in the provinces on the subject.

#### R.I.B.A. REGULATIONS FOR ARCHITECTURAL COMPETITIONS.

The Special General Meeting summoned for Monday, 2 April 1926, did not take place, as the required number of members were not present, and the notices in respect of the meeting lapsed, in accordance with the provisions of Bye-law 67.

#### R.I.B.A. SESSIONAL PAPERS.

Members are requested to note that at the General Meeting on Monday, 17 May 1926, at 8 p.m., Mr. H. S. Goodhart-Rendel [F.] will read a paper on "The Work of the late Sir Thomas Graham Jackson, R.A., Royal Gold Medallist."

#### OLD BRIDGES OF FRANCE.

##### EXHIBITION OF DRAWINGS AT THE R.I.B.A.

The exhibition of water-colour drawings, etc., of old bridges of France and other subjects, now being held at the R.I.B.A., will be open daily from 10 a.m. to 7 p.m. Saturdays 5 p.m.) until Saturday, 15 May, inclusive.

#### VISIT TO STOWE SCHOOL, BUCKS.

A visit has been arranged by the Art Standing Committee to take place on Saturday afternoon, 1 May 1926, to Stowe School, near Buckingham. Provided not less than 20 and not more than 28 members apply for tickets for the visit, a motor coach will be engaged to leave the R.I.B.A. premises at 11.30 a.m. and proceed via Hendon, Watford, and Berkhamsted, arriving at Tring about 1 p.m. for lunch at the "Rose and Crown" (Trust House). Thence via Aylesbury, Whitchurch, Winslow, and Buckingham, arriving at Stowe about 3 p.m. The party will be entertained to tea by the kind invitation of the Headmaster. The return journey will be via Buckingham, Fenny Stratford, Hockliffe, St. Albans, and Chipping Barnet, arriving in London between 8.30 and 9 p.m. The charge per head for the trip will be 15s. exclusive of lunch at Tring for which members will make their own arrangements.

Members desirous of taking part are requested to notify the Secretary R.I.B.A. as soon as possible and in any case not later than first post Thursday morning, 29 April.

#### R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28 Bedford Square, London, W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the Committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.

#### ELECTION OF MEMBERS.

7 JUNE 1926.

The following applications for election have been received. Notice of any objection or other communication respecting the candidates must be sent to the Secretary for submission to the Council prior to Monday, 17 May.

##### AS FELLOWS (43).

- ANDREW : HARRY [A. 1915], Custom House Buildings, Whitefriargate, Hull ; 9 Whitefriargate, Hull.  
 BARKER : PHILIP EDWARD [A. 1888], 32 King Street West, Manchester ; "Glenbrook," Kingston Road, Didsbury, Manchester.  
 BATES : ERNEST [A. 1904], 27 Queen Victoria Street, E.C.4 ; Winton Croft, Purley Downs, Surrey.  
 BESWICK : ALFRED EDWARD [A. 1909], 10 Victoria Road, Swindon ; 32 Westlecot Road, Swindon.  
 CASTELLO : MANUEL NUNES [A. 1904], 133 Moorgate, E.C.2 ; 26 Warwick Mansions, Cromwell Crescent, S.W.5.  
 DURAND : ARTHUR HENRY [A. 1921], 22 Orchard Street, Portman Square, W.1.  
 GEE : ERNEST [A. 1916], 24 North John Street, Liverpool ; 32 Moor Lane, Great Crosby, Liverpool.  
 GUMMER : WILLIAM HENRY [A. 1910], 721 N.Z. Insurance Buildings, Queen Street, Auckland, New Zealand ; Mountain Road, Auckland, New Zealand.  
 GUTTERIDGE : LT.-COL. REGINALD FOWLER, T.D. [A. 1909], 9 Portland Street, Southampton ; 31 University Road, Southampton.  
 HARRILD : FRED, M.A. Oxon. [A. 1922], 57A High Street, Totnes, S. Devon.  
 HOLDEN : WALTER FREDERICK CLARKE, M.C. [A. 1922], 15 Bishopsgate, E.C.2 ; Salter's Acre, Gregories Road, Beaconsfield.  
 JONES : GEORGE SYDNEY [A. 1891], 113 Pitt Street, Sydney ; The Crescent, Pennant Hills, Sydney, Australia.  
 KENNEDY : EDWIN RIDDELL [A. 1906], 11 Wellington Place, Belfast ; The Bungalow, Sandown Road, Knock, co. Down, Ulster.  
 MINTY : JAMES ANDREW [A. 1901], 35 Craven Street, Charing Cross, W.C.2 ; Beeleigh, Snaresbrook, Essex.  
 WALKER : FREDERICK ARTHUR [A. 1921], Architect in China to Messrs. The Asiatic Petroleum Co. (N.C.), Ltd., No. 1 The Bund, Shanghai, China.  
 WEARING : STANLEY JOHN [A. 1907], 3 Redwell Street, Norwich ; 4 Eaton Road, Norwich.  
 WOODS : FRANK [A. 1910], 3 High Street, Maidenhead ; "Fir Croft," Kimbers Lane, Maidenhead.

And the following Licentiates, who are qualified under Section IV, Clause C (ii) of the Supplemental Charter of 1925 :—

- BALL : CHARLES WILLIAM, F.S.I., Whittington Chambers, King's Road, Southsea ; 3 St. Ursula Grove, Southsea.  
 BERRY : JOSEPH, J.P., 3 Market Place, Huddersfield ; Hatherley, New North Road, Huddersfield.  
 BOTTOMLEY : JOHN MITCHELL, Summerland, Ramsey, Isle of Man.

- FISHER: FRANK JAMES, 38 Bloomsbury Square, W.C.1 ; "Elmsthorpe," 37 Barrington Road, S.W.9.  
 GRAY: GEORGE HERBERT, 21, Sea Road, Bexhill-on-Sea.  
 HAVERS: ALBERT CHARLES, 66 London Street, Norwich; 43 Surrey Street, Norwich.  
 KEMPSTER: FRED, 54 Bedford Square, W.C.1; Chalgrove, Ingatestone Road, Wanstead Park, E.12.  
 LONG: ALFRED, J.P., 21, New Street, West Bromwich.  
 ROOME: WILLIAM JOHN WATERMAN, F.R.G.S., Greenisland, Belfast.  
 SHENTON: FREDERICK WILLIAM, 27 Fitzroy Street, W.1; Elwy Cottage, Whetstone, N.20.

And the following Licentiates who have passed the qualifying Examination:—

- BELSHER: BERNARD JAMES, M.Inst.C.E., Stepney Council Offices, Raine Street, Wapping, E.1; 5 Hilldrop Road, Camden Road, N.7.  
 BOND: JOHN OWEN, 29 Castle Meadow, Norwich; Corner Cottage, Eaton Hill, Norwich.  
 CLARE: GEORGE EDWARD, 33 College Road, Harrow; The Rosary, Flambard Road, Harrow, Mddx.  
 DAVIDSON: WILLIAM, 4 Melville Street, Edinburgh; East House, Liberton, Midlothian.  
 EASTON: COL. ARTHUR, T. D., 1 Manor Street, Hull; "Foss Dyke," Hornsea, E. Yorks.  
 FORGE: FREDERICK LINDUS, 3 Crooked Lane, King William Street, E.C.; "Briarside," Weybridge, Surrey.  
 HAYNES: FREDERICK STANLEY, 90 Hanover Road, Brondesbury Park, N.W.10.  
 HILL: THOMAS JACKSON, 52 Union Street, Oldham; 7 Langdale Avenue, Coppice, Oldham.  
 JOHNSTON: JOSEPH MARR, 47 Charlotte Street, Leith; 5 Derby Street, Leith.  
 LAMB: PERCY AIDAN, 13 John Street, Adelphi, W.C.; "The Mount," 10 Liverpool Road, Kingston Hill.  
 LUMB: FRANCIS LEONARD, 19 Clifton Street, Blackpool, and Estate Office, Fleetwood; "Whincote" Cleveleys Avenue, Cleveleys Park, Blackpool.  
 MUNDEN: PATRICK JOHN FITZGERALD, 28 South Frederick Street, Dublin; Ivydene, Merrion Road, Pembroke, co. Dublin.  
 SANDERS: INGALTON, Midland Bank Chambers, 165 High Street, Southampton; Mount Beulah, 122 Romsey Road, Southampton.  
 SOUTAR: JOHN CARRICK STUART, "Wylde," North End, Hampstead, N.W.3, and 8 King William Street, Strand, W.C.2; "Fairport," Turner Drive, Hampstead Garden Suburb, N.W.11.  
 TAYLOR: SAMUEL, 74-78 Manchester Road, Burnley; 229 Manchester Road, Burnley.  
 WEEKES: JOSEPH, County Architect, 88 College Street, Dumfries; 227 Cokerhill Road, Glasgow.

#### AS ASSOCIATES (16).

- ALABASTER: JOHN RICHARD [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 22 Arica Road, Brockley, S.E.4.  
 ALLEN: ALFRED MAXWELL [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Nortons, Lingfield, Surrey.  
 BRADDOCK: HENRY [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 45 Dennis Park Crescent, Wimbledon, S.W.20.  
 HOLLINSHED: CHARLES NEVILLE [Special], c/o Commissioner for Australia, 44 Whitehall Street, New York, U.S.A.  
 LLEWELLYN-MORGAN: GUY [Passed five years' course at London University School of Architecture. Exempted

from Final Examination after passing Examination in Professional Practice], 11 King's Bench Walk, Inn Temple, E.C.4.

- LORD: WILFRID TURNER, B.A. Cantab. [Final], 18 Park Hill, Ealing, W.5.  
 McCONNEL: KENNETH HAMLYN, B.Arch. Sydney [Passed five years' course at Sydney University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], c/o Queensland National Bank, 8 Princes Street, E.C.  
 MARTIN: GEORGE LEGAT, Junr. [Final], 31 Maureen Terrace, Seaham Harbour.  
 MARTIN-SMITH: DONALD FRANK [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], The Briars, Arkley, Barnet.  
 MORRIS: ALEXANDER GEORGE [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], "Thornbury," Westleccott Road, Swindon.  
 MOSELY: EDNA [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 10 Caversham Road, St. John's Wood, N.W.  
 PRESTON: FREDERICK LESLIE [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 190 Clive Road, Dulwich, S.E.  
 RITCHIE: THOMAS [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 59 Gloucester Crescent, Regent's Park, N.W.1.  
 ROSCOE: FRANK, Junr. [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Brownlea, Berkhamsted, Herts.  
 STEWART: ALEXANDER MALCOLM [Passed six years' course at Robert Gordon's College, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 93 Kenneth Street, Inverness.  
 WOOD: JOHN WILLIAM [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 11 Belsize Road, South Hampstead, N.W.6.

#### AS HON. ASSOCIATES (2).

- BELL: ROBERT ANNING, R.A., R.W.S., R.B.C., Hon. LL.D., 28 Holland Park Road, W.14.  
 MACKAIL: JOHN WILLIAM, M.A., LL.D., F.B.A., Professor of Ancient Literature in the Royal Academy, 6 Pembroke Gardens, W.8.

#### AS HON. CORRESPONDING MEMBER (1).

- DEFRASSE: ALPHONSE, Inspecteur Général des Bâtiments Civils et des Palais Nationaux, Architecte en Chef de la Banque de France, 31 Rue de Tournon, Paris (6<sup>e</sup>), France.

#### ADVERTISEMENTS IN THE R.I.B.A. JOURNAL

The attention of members of the R.I.B.A. is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. An increase in the income derived from such advertisements is a help to the financial position of the R.I.B.A. and an advantage to all its members. The circulation of the JOURNAL is world-wide, and going, as it does, to more than 6,000 architects in almost every part of the Empire, its potential value as an advertising medium is unequalled.



## Competitions

### EACH IMPROVEMENT SCHEME, ABERDEEN.

The Town Council of Aberdeen invite architects to submit competitive designs for the proposed buildings to be erected at the sea beach, Aberdeen. Assessor, Mr. John Keppie [F.], President of the Incorporation of Architects in Scotland. Designs to be sent in not later than 28 June 1926. Conditions may be obtained from Mr. B. Gardner, Director of Housing, Town House, Aberdeen.

### OWNHAM MARKET U.D.C. HOUSING SCHEME COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

### PROPOSED NEW ELEMENTARY SCHOOLS, WARLEY, OLDBURY.

The Urban District Council of Oldbury, proposing to erect new elementary schools, invite architects resident in the United Kingdom to submit designs for same in competition. Premiums of £200, £100 and £50 are offered. Assessor: Mr. W. S. Skinner [F.]. Designs to be sent in not later than 21 May 1926. Conditions may be obtained from the Clerk of the Council, Council Offices, Oldbury, Worcs., by depositing £2 2s.

### COUNCIL OFFICES AND FIRE STATION: PURLEY.

The President of the Royal Institute of British Architects has nominated Mr. P. D. Hepworth, F.R.I.B.A., as Assessor in this competition.

### PROPOSED ISOLATION HOSPITAL FOR INFECTIOUS DISEASES AT DONCASTER.

The Doncaster Town Council invite architects to submit designs in competition for the Isolation Hospital for Infectious Diseases, proposed to be erected on a site off Ackhill Road and Common Lane, Doncaster. Architects competing must be established in private practice. Assessor, Mr. T. R. Milburn [F.]. Last day for questions 1 March 1926. Designs to be sent in not later than 1 May 1926. Premiums, £200, £100 and £75. Conditions may be obtained from the Town Clerk, Town Clerk's Office, Doncaster, by depositing £1 1s.

### SCHEME FOR BUILDING LARGE RESIDENCES: CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competition.

### MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott,

F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

### LEAGUE OF NATIONS.

#### COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

### CHINGFORD COUNCIL OFFICES COMPETITION

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

### AUSTRALIAN NATIONAL WAR MEMORIAL AT VILLERS BRETONNEUX

The date for the submission of designs in the above competition has been further extended from 31 May to 31 July 1926.

### SCOTTISH LEGAL LIFE ASSURANCE SOCIETY: NEW AND ENLARGED PREMISES.

The President of the Royal Institute of British Architects has nominated Mr. John Keppie, A.R.S.A., F.R.I.B.A., as Assessor in this competition.

## Members' Column

### APPOINTMENT VACANT.

Services of Senior Assistant, capable designer, with good general experience of Construction, required immediately. Good salary for suitable man. State by letter age, experience, references and salary required. Reply Box 2029, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### PARTNERSHIP WANTED.

A.R.I.B.A., with small London practice, desires partnership in established practice after a probationary period. Has studied for a full time course at a recognised school of architecture, and had nine years' experience in well-known offices in London and the provinces. Use of London address and 'phone could continue.—Box 7426, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### PARTNERSHIP WANTED.

A.R.I.B.A., aged 36 years, desires partnership, or position with a view to partnership, in London or South of England. Small capital available. Is energetic and unafraid of work. Can commence immediately.—Apply Box 1646, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### OFFICES TO LET.

ARCHITECT (F.R.I.B.A.) wishes to let off two rooms in West Central District. Rent £75 per annum.—Reply Box 1746, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### OFFICE TO LET.

A.R.I.B.A. wishing to conduct a good deal of his work from his private residence desires to let his small West End office furnished or unfurnished, himself retaining a small interest, to one who might be willing to render assistance occasionally on a percentage of fees basis or other arrangement. One who is an Architect and Quantity Surveyor would be appreciated.—Reply Box 1546, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### TO LET.

To let by Architect to Architect only, good room in Holborn Offices, with telephone, light, heat, and all facilities. Terms on application.—Reply Box 9765, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## Minutes XII

At the Twelfth General Meeting (Ordinary) of the Session 1925-1926, held on Monday, 19 April 1926, Mr. E. Guy Dawber, F.S.A., President, in the chair.

The attendance book was signed by 29 Fellows (including 10 members of the Council), 19 Associates (including 3 members of the Council), 5 Licentiates (including 1 member of the Council), 1 Hon. Associate, and a large number of visitors.

The Minutes of the meeting held on 29 March 1926, having been taken as read, were confirmed and signed by the Chairman.

The Hon. Secretary announced the decease of:

Rhodes Calvert, elected Fellow 1893.

Stanley Miles Spoor, elected Fellow 1921.

Gilbert Scott Cockrill, elected Associate 1909.

Fred Walker, elected Licentiate 1911.

And it was RESOLVED that the regrets of the Institute for their loss be entered on the Minutes, and that a message of sympathy and condolence be conveyed to their relatives.

The following members attending for the first time since their election were formally admitted by the President:—

Mr. W. E. Norman Webster [F.].

Mr. R. Tilsley Green [A.].

Mr. D. J. Simpson [A.].

Mr. C. Sunderland [A.].

Mr. T. F. Trower [L.].

Mr. Gilbert Bayes and Mr. Laurence A. Turner, F.S.A. [Hon. Assoc.], having read papers on "The Co-operation Architect and Craftsman," a discussion ensued, and on the motion of Mr. Irving K. Pond, Past-President of the American Institute of Architects, seconded by Mr. Oswald P. Mil [F.], a vote of thanks was passed to Mr. Bayes and Mr. Turner by acclamation, and was briefly responded to.

The meeting closed at 9.50 p.m.

### NATIONAL HEALTH AND PENSIONS ASSURANCE

The Architects' and Surveyors' Approved Society,  
26 Buckingham Gate, London, S.W.1.

#### CONTRIBUTIONS.

The contribution for men is 1s. 6d. per week, 9d. of which payable by the employer, and for women 1s. 1d., 7d. of which is payable by the employer.

#### ORDINARY BENEFITS (HEALTH INSURANCE).

*Sickness Benefit.*—Men, after 26 contributions have been paid, 9s. weekly; after 104 contributions have been paid, 12s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly; after 104 contributions have been paid, 12s. weekly.

*Disablement Benefit.*—Men and women, 7s. 6d. per week after 104 contributions have been paid.

*Maternity Benefit.*—40s. after 42 contributions have been paid.

#### ADDITIONAL BENEFITS (HEALTH INSURANCE).

The recent valuation of the Society's assets having shown a largely increased surplus, the following scheme of additional benefits was brought into operation from 6 July 1925:

*Sickness Benefit.*—Payable at the increased rates of 22s. per week for men, and 19s. for women.

*Disablement Benefit.*—Increased to 11s. per week for both men and women.

*Maternity Benefit.*—Increased to 54s.

*Special Benefits.*—Grants made to members entitled to "additional benefits" for the full or part cost of optical, dental, hospital, nursing home or convalescent treatment, also for glass surgical appliances, artificial teeth, etc. Members may choose their own dentists, opticians or institutions.

Forms of application for membership, also pamphlet detailing the benefits under the new Pensions Act, may be obtained from the undersigned.

HERBERT M. ADAMSON; *Secretary*

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to the method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

#### R.I.B.A. JOURNAL.

*Dates of Publication.*—1926: 24th April; 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.

THE ARDEN PRESS  
STAMFORD STREET  
LONDON, S.E.



# Journal of the Royal Institute of British Architects

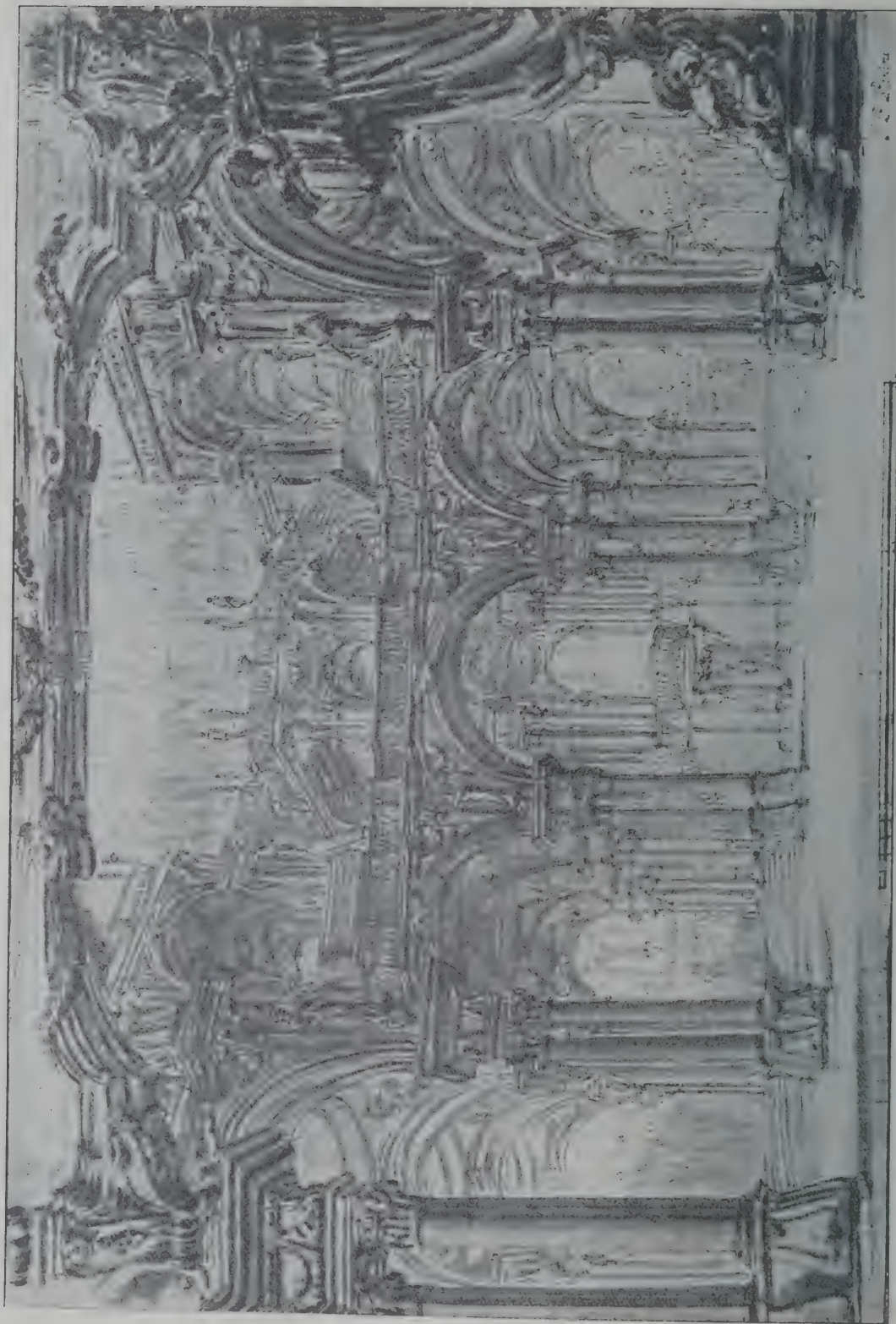
VOL. XXXIII. Nos. 13 & 14

THIRD SERIES

8 & 22 MAY 1926

## Contents for 8 & 22 May 1926

DRAWING BY G. P. PANNINI .. .. .	<i>To face</i>	403
THE CO-OPERATION OF ARCHITECT AND CRAFTSMAN. By Gilbert Bayes and Laurence Turner .. .. .		403
Discussion .. .. .		408
EXHIBITION OF WATER-COLOUR DRAWINGS OF OLD BRIDGES IN FRANCE: Opening by the Earl of Crawford and Balcarres		412
REVIEWS:		
ARCHITECTURE EXPLAINED. By C. F. A. Voysey .. .. .		414
KETTRIDGE'S TECHNICAL DICTIONARY. By W. P. Steel .. .. .		414
YEAR BOOK OF THE ARCHITECTURAL LEAGUE OF NEW YORK, 1925. By Professor A. E. Richardson .. .. .		415
FRENCH PROVINCIAL ARCHITECTURE. By F. R. Hiorns .. .. .		416
VIGNOLA. By Max Judge .. .. .		416
SPECIFICATION. By W. E. Vernon Crompton .. .. .		417
WATERLOO BRIDGE: DEBATE IN THE HOUSE OF COMMONS .. .. .		418
CHISWICK HOUSE. By Francis R. Taylor .. .. .		419
LEGAL: HOUSING SCHEME: ARCHITECT'S REMUNERATION FOR ABANDONED WORK. By W. E. Watson .. .. .		420
MR. WALTER TAPPER, A.R.A. .. .. .		420
ALLIED SOCIETIES:		
SHEFFIELD, SOUTH YORKSHIRE AND DISTRICT SOCIETY OF ARCHITECTS .. .. .		420
LEICESTER AND LEICESTERSHIRE SOCIETY OF ARCHITECTS .. .. .		420
OBITUARY:		
L. J. WILLIAMS .. .. .		421
GILBERT SCOTT COCKRILL .. .. .		421
FRED WALKER .. .. .		421
A.B.S. SCHEME OF PROFESSIONAL INSURANCE .. .. .		421
FRANCO-BRITISH UNION OF ARCHITECTS. PROGRAMME FOR ANNUAL GENERAL MEETING .. .. .		421
WAGES SLIPS ON TENDERS .. .. .		422
R.I.B.A. MAINTENANCE SCHOLARSHIPS IN ARCHITECTURE .. .. .		422
NOTES FROM THE MINUTES OF COUNCIL .. .. .		422
ATTENDANCES AT COUNCIL AND STANDING COMMITTEE MEETINGS 1925-26 .. .. .		423
THE ANNUAL ELECTIONS: NOMINATIONS .. .. .		424
NOTICES .. .. .		424
COMPETITIONS .. .. .		427
MEMBERS' COLUMN .. .. .		427
MINUTES .. .. .		428



From the R.I.B.A. Collection

G. P. PANNINI





## Co-operation of Architect and Craftsman

BY GILBERT BAYES, R.S.B.S., AND LAURENCE TURNER, F.S.A. [*Hon. Associate*]

(*Read before the Royal Institute of British Architects on Monday, 19 April 1926*)

PART I. BY GILBERT BAYES

THE subject for discussion this evening is "The Co-operation of the Architect and the Craftsman," and, looking round at the tendencies of to-day, it would seem that at no time has this co-operation been so needed by the craftsman as it is to-day. And if at first you should feel that I am discussing other things in this paper and must have brought out the wrong sermon, I must ask you to bear with me for a little, as it is only a preliminary, the understanding of which would seem to be necessary, in order to see how important this subject is to us to-day.

At the present time we are passing through a curious stage of freaks and fancies, and when I use the word "we," I am speaking mainly of the craft of the painter and the sculptor, and it would be well to take a preliminary survey and try and see what forces are to-day influencing them—what is good in these forces and what would seem to be evil—I say would seem to be evil because one must remember that:

"Or ever a god rides out of the East crying a new dawn creed,  
For every stone that is thrown in scorn the wounds of the old gods bleed.  
For never a creed or a faith was yet, but once was a heresy.  
Never a God first spake to man, but spake a blasphemy."

Now while on the one hand we must expect change, change simply for the sake of change becomes restlessness, and to cut oneself clear of the past is only to be a plant without roots that will quickly die.

You will, I think, agree, though this is not often put into words, that at no time in the history of Art, has the artist been more capable of realistic representation than he is to-day, and for a number of years this has been made the chief aim and ambition of the greater number, and this is apparently due to certain conditions peculiar to to-day.

First, that a comparatively small portion of the yearly output is in any way applied to its true use—the function of decorating.

Secondly, to the fact, as the Prime Minister recently said, that the days of the Medici are passed—in other words that the patron, in the old sense of the word, is virtually, if not quite, extinct, and since we must show our work and have some way of expressing our thoughts, the yearly exhibition has come into being.

Now the exhibition, valuable as it undoubtedly is up to a point as a place to show our experiments and have a certain freedom, becomes a menace if depended upon too far, and this is what is happening at present. It tends to introduce quite arbitrary fashions, plants without roots.

In the best periods, as far as one can gather, all men were craftsmen and had learnt their craft from the base upwards, generally being apprenticed in their very young days to masters from whom they early learnt all the technical side of things, so that, at the age when we generally start, they were fully equipped with the knowledge of tools and materials. They also operated over a much wider field, and the one man was often painter, sculptor, and even architect. To-day this a very difficult thing to achieve, and we should have the closest possible co-operation, to take in some measure the place of these conditions of training. As it is, owing in a great part to the preponderance of the exhibition in our lives, many begin, or try to begin, as the artist and never get to be good craftsmen, and many who can model or paint with a realism truly amazing, have little or no knowledge of the application of their art to the needs of decoration.

As an example of the unsuitability of the usual exhibition work for decorative purposes, I would quote the Hotel de Ville in Paris. It is possible that I have quoted it here before, but it is such a flagrant example that I will risk repeating myself. At one time, I went regularly to Paris to see the Salons and was conversant with the paintings shown each year and the tendencies of the painters, but it was not until some time after, when I was studying there, that I saw the Hotel de Ville with many of the paintings, that had previously been known as the pictures of the year at the Salon, upon its walls and ceilings. It was a terrible shock. Realistic oxen more than life size, ploughing towards you from the ceiling, apparently real people in crowds all

round the walls with strong perspective cutting away all feeling of support. Only two men came through with flying colours, Puvis de Chavannes and Henri Martin. The Pantheon in Paris might be taken as another example from which Puvis and Humbert stand out as successful, the most terrible failure being Detaille's "Cavalry Charge"—enormous real men and horses tearing towards you. And many cases in both crafts might be added to these where realism has failed.

And now, since realism has about reached its height, if indeed it has not fallen over the other side, and since we have found realism and realism only unsatisfying and when used with architecture unsuitable, a reaction has set in and men play at being primitive and think as long as the thing is unlike nature, it must be Art; quite failing to realise that the primitives were being as realistic as they knew how to be and though their simple almost child-like, outlook helped them to make decorations, we have to arrive at our results differently.

People who look upon our works are people of to-day and for us to ape the child is an unpleasant affectation. And since, in recent years, much of the carving has only been copying of clay and has overlooked the fine qualities of stone or marble and an undigested admiration of anything classical has led the sculptor to a realism that has proved unsatisfying, men are now trying what they can get from the negroid races, and we are shown, let us say, an egg with eyebrows and are told it is a portrait study, and a man shouts on the house-tops that he has carved a work entirely himself and men are much impressed quite regardless of the fact that the result may in many cases be regarded either as a catastrophe or a poor joke, according to the mentality of the onlooker.

In the past realists underrated the value of form considered in the abstract, so there is now a school that makes everything in circles, squares, triangle or other geometric forms, and the last state of the art is worse than the first.

I have every sympathy with those who feel that realism, as such, is played out, and that abstract form must receive more consideration, but I am quite certain that the modern school is going much too far, and is throwing overboard a great deal that is necessary, and had there been closer co-operation between the architect and the craftsman, both the craft side and the art side would be in a much



healthier state to-day, and the sculptor and the painter would have had their very proper desire for abstract form satisfied in making work suitable in scale and treatment and colour for the building which it was to adorn, and they would have realised that negroid art, though quite well in its proper place in or on a native building, is not suitable for our buildings here, or for our people, and it would have prevented them doing the quite needless things which they are at present doing, and unless the architect supplies this opportunity of collaboration, I do not see what power is to bring the craft back to sanity.

You see the call on our work is almost entirely an æsthetic one, we have very few real needs to fulfil beyond that. In the case of other crafts, if a chair will not stand being sat in—well, you do not use that design again, but another. If an iron railing lets those down that lean upon it, there is trouble, and you use a better; but we seldom have any tests like these. If we spoil the proportion of a room you have designed or put up some figures that do not harmonise with your building, you probably design a building next time without any painting or sculpture upon it; in fact, I think that has often been done. Some time ago it seemed to me that architects were designing some quite dignified interiors, but designing them with the definite idea of excluding the art of painting. To-day the same thing seems to be going on with regard to sculpture on the outside of buildings, and this brings me to another point. Many of the painters in the early Victorian times went in for the historic or narrative picture, and sometimes it was all history or narrative and not much visual beauty, with the result that we have recently had a school throwing all subject overboard, trusting instead in the technical quality of painting to make the thing a work of interest, but using subjects that seldom had any appeal outside this. Again, surely this is going needlessly far, surely there is no reason why a work should be held to be any less good because it is able to interest a person who has no art training. I suggest that in these things it is part of our duty, if work is put up in public, to see if we cannot put up something that will be of interest to the people who have to live with it, and that it can be done in most cases without any detriment to the art practised.

The Italian primitives used subject and story, and held the people of their time, yet their work is fine decoration, and at one time it was necessary

for sculpture to be understood by the masses, and it was never the worse on that account. You may say: What has all this to do with architecture? Well, I believe that these fashions run through all the arts, but at different speeds, and that architecture is affected like the rest, and whilst agreeing that in the past gold-framed pictures have been plastered all over the walls to the detriment of the whole effect, and sculpture equally vaguely on the outside of buildings, yet to do away with these two arts altogether is rather like the school of painters I have mentioned with the lack of subject matter that bring work to birth that lacks human interest. If we have failed to fulfil the æsthetic needs in the past it is a mistake to react too far in the other direction.

In architecture the entasis on a column or the balance of a building may be a very fine thing, but it is not enough to hold the attention of the unsophisticated, and I would urge that here we could help the architect, in fact we are necessary to him. A craftsman may have ways of getting round a difficulty that the architect may not know, just as the architect has difficulties that the craftsman has not realised; one of his difficulties is, of course, cost, but even here the craftsman may be of use in suggesting the alternative treatment or material. The Germans often seem in their modern work to manage the interweaving of their sculpture with their architecture better than we do, and though one may often not like the work in detail, the weight and mass is constantly most successful. America also has done very fine work in applying sculpture to architecture, and there, I am told, that the sculptor, in some cases at least, is called in at a much earlier stage to co-operate with the architect, and the work between the two is apparently much closer than is usually the case here. Of course, one can recall cases amongst us where this co-operation has been almost perfect, but it is the exception rather than the rule. A short time back so much architectural and decorative work was simply a copy of a past period that many of the painters and sculptors preferred to look elsewhere for their livelihood rather than to copy merely some past man, and this too close copying of the styles in decoration has had the effect of preventing us from having a healthy style of our own to-day. We have to grow out of the past, but not copy it, but to-day things have changed—architecture is alive and is really seeking to answer the needs of the time and is

creating a healthy style of its own. We look to you to help us also to found a healthy school. You are a messenger to us of modern needs, it is for you to keep us sane, though modern. You supply the abstract form to which we must live up; this can only be done by close co-operation and by interchange of knowledge; new materials are coming into use which will bring fresh forms to birth. In art as in life, mistakes that one generation makes the following generation pays for—the sins of the father are visited upon the children—overcrowded decoration of yesterday results in work that tends to be too impersonal to-day. Petty prettiness in

one generation results in the cult of ugliness in the next, and if we let that continue too far, the following generation will find that people say: If this is art we will have none of it. I believe that art in its widest sense is a necessary of life, and therefore I beg you to let us put our respective houses in order, and to remember that our arts are not nice little detached villas each in its own daisy-edged garden and with no connection with anyone else. If we are to fulfil our true destiny we must not be separate, but each a part of the other, and we shall then become part of the life of the people instead of being looked upon as curious excrescences of doubtful value.

## PART II.

BY LAURENCE TURNER.

As I am a carver, I can only speak from the somewhat limited point of view of the decorative craftsman who is engaged in executing architectural ornament in wood, stone and plaster.

Without co-operation, no work can be brought to a successful conclusion.

What I am going to say is rather a criticism of the architect, but I don't at all mean to imply that all architects are wanting in the virtues which I consider they should possess.

Far from it. I believe architects to-day are very much more accessible and sympathetic to my profession than they were in the past. I am sure I voice the feelings of my *confrères* by stating that the more experienced the architect is, the greater pleasure it is to work under him.

Every good craftsman must feel this, because he must want his work to be appreciated. If the architect can give him sage advice, and honest, thoughtful criticism, he will not be ungrateful. An enthusiastic workman is ever ready to be taught, and to gather new ideas. But it is most irksome to have stupid criticism from a novice, and suggestions for experiments which, from one's own experience, are obviously futile.

I have heard an architect disparage men who have been engaged in carrying out his designs, and complain that they have no interest in what they were doing, and that they were stupid and ignorant. Perhaps they were uninterested, and showed no enthusiasm, but he did not take into account that what they were doing was dull and monotonous.

There is much that may be done to make men more interested in what they do, and the architect can help in this by showing that he is keenly alive as to the result of their labour. A word of praise to them, or a few expressions from him to show that he is appreciative of good work, may create a new atmosphere, if he speak in a genuine, honest, straightforward way, without any suggestion of being patronising.

To make men keener about their work, it is necessary that the architect, employer, and men should get to know one another better. That there should never be the slightest suggestion that men are machines or "hands," as they are used sometimes to be called. It is important to keep a well balanced set of men together, so that they get to know and trust one another as well as their employer. Above all, that they should get to know the character of the work the architect requires to be done for him.

I think it is most important that architects should continue to employ the same men to do their work—not to jump about from one firm to another because A may happen to tender a price a little lower than B, therefore A must be given the work to do, although B has often been employed before. That is not the way to get good work done. There is no longer the same amount of interest taken in work which is competed for and obtained by cheese-paring prices.

It is a pleasure to the men to receive a visit from an architect they respect. They look forward to his coming, and do not treat him as an inspector, from whom everything has to be



concealed. I remember one imperious architect, who had come to look at some work I was doing, which was difficult to produce, and to whom I appealed for advice, saying that "it was not his job to say how it was to be done." That attitude of mind is antagonistic to co-operation. It damps one's ardour, and is provocative of retaliation. Most of us must have experienced the pleasure it is to receive a kindly sympathetic letter by the morning's post, and what a difference it makes to the pleasure of the day's work.

I think the English workman is a very fine type of man. Unfortunately, there are now too many who are only half educated, who wander round from workshop to workshop, owing to their not having served an apprenticeship, but even these in time will learn a trade. Let us hope it is not that of begging.

My plea is that the architect and the workmen should become better acquainted. This will never come about if the former show any "side" or suggestion of superiority. I remember a friend of mine, now dead, telling me how, when visiting a house, which was being constructed for him by a builder in Yorkshire, they got rather hot over some difference of opinion about the way in which it was being built. My friend turned to him and said, "you builders seem to think you know more than we architects." "Nay," said the builder in his Yorkshire dialect, "nay, I don't say that, but I think we know as much."

There are so many ways in which the craftsman may be helpful to the architect, and in which he will help him, if he cares to listen to his suggestions. I will cite but one or two instances which come to my mind.

I suppose there is no part of an architect's art, about which he is more sensitive to criticism than the section of his mouldings. Yet there are many instances when the carver can help him very materially, particularly with regard to the mouldings which have to be carved, because the mere fact of carving them takes away from their bulk, and consequently they require to be differently designed. Again, there are many instances in which the architect may not fully understand the quality of the stone or marble that he has selected, and his mouldings may not be adaptable to the texture of the material. The selection of stones and woods, and the suitability of the

design to the material, may well be subject for mutual consideration. In plaster-work, for instance, considerable knowledge is often required to determine how a decorative ceiling should be made. How much of it shall be solid plastering, how much should be fibrous plastering, whether the ornament should be applied or "bedded" or whether parts should be "run."

I should like to see architects in the workshops much more often than they are, and not only the architect, but the layman as well. I believe that if the public could see and know how good cabinet work was made, they would not always be on the look out to buy the so-called cheapest goods. They would soon know that there is a limit to cheapness, when it cuts out honest labour.

I believe most craftsmen take the utmost pains to produce the very best result they can from the designs supplied by architects. Occasionally, the taste of the architect may be so much in direct opposition to that of the craftsman as to make the execution of the work tedious, but even then, although he may not be helpful in adding interest to the design, he will have the work carefully carried out.

It is only when one knows the architect personally, and feels that one is being trusted, that the architect can get the best work out of a craftsman. Shyness, fear of giving offence, or the dread of being thought presumptuous may keep back suggestions which might be of great use; for it sometimes happens that a suggestion proffered, though not accepted, may be the father of a new idea in the designer's mind.

As to the making of designs for modelling or carving, it is a mistake for architects to design everything. To put it quite plainly, no designer can ever know what he ought to expect from a craftsman in any material, if he has not worked in that material himself. Most designs for carving are far too intricate and crowded, because they are drawn on paper and no allowance has been made for the effect of the work when in relief.

The ideal position for the architect to take is to design his building, to suggest the main lines of the enrichments, and to leave the detailing of the embellishments to the man who has to carry them out. If he says the man is not capable of doing so, it is evident he has gone to the wrong craftsman. When elaborated drawings are put before a carver, and he is told to go his own way

and ignore them, but to keep to the character of the design supplied, it is obvious he cannot do so. When once a piece of carving has been photographically presented, how can the craftsman forget or ignore it, and then go his own way, but still keep to the type of the ornament submitted to him?

For my own part, I should like to have more constant visits from architects, to watch the progress of the work being executed for them on buildings, and in the workshops, provided they come with the intent to be helpful, to assist in making the work more beautiful, and the men more enthusiastic. They will find that their advances are reciprocated, and a sense of unity of purpose will be created, which will go far

towards united co-operation. Most of our deficiencies arise from the craftsman not being enough of an architect, or the architect enough of a craftsman.

Before I finish, allow me to plead for craftsmen, that their work receive better recognition.

It is of but small interest to be told the name of the unveiler of a memorial, or the opener of the door with a golden key. What should be announced are the names of those who have assisted by their art in producing a beautiful creation.

The purely commercial man or firm as a rule has much more prominence given to his name and goods than the men who, by their co-operation in the arts, have produced a beautiful building.

## Discussion

(THE PRESIDENT, MR. E. GUY DAWBER, F.S.A., IN THE CHAIR).

Mr. IRVING K. POND (Past President of the American Institute of Architects), in proposing the vote of thanks, said: I have for many years regularly read the papers which have been presented before this Institute, and the discussions which have followed them; and it has seemed to me that we on our side of the water never can quite reach your craftsmanship. The architect should be grounded not only in the work of the carver and the sculptor and the painter; he has to go far afield and know something of the flow of forces through the steel, through the reinforced concrete; he has to know something of the feel of the metal in his hands before he designs the iron door. Unless he knows the feel of the metal, as the craftsman does, he will not produce a worthy work of art.

Mr. OSWALD P. MILNE [F.], in seconding the vote of thanks, said: I think the architect more than ever realises his debt to the craftsman. Indeed, the architect really does nothing but conceive his work, and it is only through the craftsmen, whether they be humble craftsmen, such as bricklayers and plasterers and so on, or the greater craftsmen, carvers and sculptors, that he is able to get any work done at all. In that relation the architect is really only there for his conception of the thing.

We have had two most interesting papers. Mr. Bayes said that we are more restrained in the use of sculpture and painting than we might be. I think we look at them more as part of the whole building than we used to. The habit was, formerly, for a building to be designed, and then pictures in frames were hung on the walls and sculpture was brought in to decorate it. Now, the architect conceives the building more or less as a whole, with the painting and the sculpture as part of the scheme. He should therefore get into co-operation with the painter, the sculptor and the carver at an earlier stage. It is only by co-operation between them all that a building can be a success and the conception of the architect can be carried out.

The PRESIDENT: We have a very well-known designer and craftsman present to-night, Mr. Voysey, and I am sure we should like to hear what he can say to us.

Mr. C. F. A. VOYSEY: I congratulate the Institute on having chosen two readers of papers who are so eminently fitted for the work by their intimate association with architects and with craftsmen, having employed many craftsmen and knowing all the eminent architects of to-day; and also that they are artists to boot. You could not have had a more perfect combination of qualifications.

One thing which Mr. Turner said rather hurt me: that a man could not design for any craft unless he had worked in it. I have not a good memory, but the impression I got from the remark was somewhat to that effect. I feel, not being a carver, that it is a dreadful bar to me as an architect if not allowed to design carving. I want to say that, personally, I am deeply indebted to the craftsman; I believe I have learned more about building and how to be an architect from the craftsman than I have from your schools or from any educational body. It is the craftsman who has helped me in my work all through my life. I want to tell you of an instance in which an architect designed some carving for his building, and he made a full-sized detailed drawing of it, giving sections, the carving being such as he wanted in his scheme. He went to a very eminent R.A., a man who is recognised as a brilliant artist. The architect said to him, "I have made a model of what I want, but I would rather leave it to you; I have absolute confidence in you; you are recognised as a man of capacity, and I want you to do it; never mind what I suggest." The carving was done, the architect was satisfied and the carver was satisfied. But the architect had made a slave of him; he should not have done it. He was not dissatisfied with the work: he was pleased with it when it was done; it was what the architect wanted. In another case the architect left it to the eminent R.A., and instead of an angel with floating feet, a spiritual sort of



creature, he gave him a board-school child who was tripping along the pavement, and that hurt the architect very much. How will you reconcile those two positions? You cannot expect really good art from any man unless you give him liberty. We cannot be saints unless we have had the liberty to be sinners. In one case the architect got what he wanted by telling the man what he wished him to do; in the other case he got what he did not want by leaving him to do what he liked. It is a very subtle question. But what we need for progress at all, is freedom; we must leave people free. I should like to know how far the architect is justified in controlling his carver.

Mr. H. B. CRESWELL [F.]: Mr. Bayes and Mr. Turner are very welcome here to-night. My own strong feeling is that we should see craftsmen here a great deal more often than we do.

A year or two ago, I happened to write a letter to our JOURNAL suggesting that we should identify ourselves more directly with the individual craftsmen, and I suggested that a register of craftsmen should be kept in the Library of the Institute, with a portfolio illustrating their characteristic work, so that we could go to the source and find what we wanted. That was taken up by the Art Committee, and it found it good, and sent it up as a recommendation to the Council. The Council approved of it, and returned it to the Art Committee for it to formulate a practical means of bringing it into effect, which they did. It was then sent up to the Council, and the Council voted, six one way and half a dozen the other; and the President of the time gave the casting vote against it. I think he was right, in principle, in putting his veto to it, because it was an innovation, and I have no regret on that score. It was a satisfaction to me to know that the body of the Institute seconded the idea so thoroughly. Since then, the Institute has set up a Committee with the special duty of safeguarding the interests of the individual craftsman, and when I say we welcome craftsmen here, it is not merely an expression of sentiment, but a statement of fact.

We have greatly neglected the craftsman in the past. In this room, for thirty years, we have been talking about the craftsman; the one thing we have not done for him is to employ him. We are not employing craftsmen, we are employing commercial exploiters of craftsmen, which is a different thing. The commercial exploiter gets our order. The next step is that a sketch is made by a second party, then somebody makes a diagram, and somebody else makes a cartoon, and somebody makes a tracing, and the work is given out among carvers and other craftsmen, of various degrees of ability and at various salaries. Even if we allow ourselves to be stultified into the idea that the result is a work of art, we know it really is not.

Mr. REGINALD HALLWARD: I should like, as a craftsman of many years' standing, to say how much I appreciate the papers which have been read by men who are engaged in the work they spoke about. I sympathise largely with what has been said. But in both cases it seemed a little out of date. That sort of thing has been said during thirty years of my life. I wish to reciprocate the spirit of Mr. Creswell's remarks on the injury suffered by art through the invasion of commercial interests of certain people in this country. Still,

Mr. Creswell's view of craftsmen is not one we can altogether adopt; we must not consider ourselves perfect and architects imperfect. We want to get beyond the stage, architects *versus* craftsmen. I could rattle off formulas that are applied to architects and craftsmen to-day, but they do not bring us any nearer to the living force of both occupations. I feel that the continual use of that word "craftsman" after thirty years has become tiresome. Let us substitute the word "artist." As it stands, the craftsman is always spoken of as in a different attitude from that of the architect; but in my experience I have not found that the working of the artist and the architect did anything else than unite them together. There has been a common feeling in the work. As one who has not always been approved of by architects for many years, I can say that my happiest work was and is still done with them. Where the architect has been an artist, though there have been differences of opinion, there have been mutual consideration and help, without which the assistance which the architect can give me and I can give to the architect would never arise. It is time we got down to that ground. Both of us lack certain things, and those things being added will do what no amount of conversation as to what craftsmanship is can do; for at the back of it all is human life.

Mr. GEORGE SHERINGHAM: I was unprepared to say anything before such a distinguished company, but as no one has spoken of the painter, I think he deserves mention because of the mis-treatment he too often has received in recent years from the architect for he designs his building in such a way that it is impossible for the painter to enter into the decoration of it. For instance, how few buildings have been recently built in which the decorator has worked with the architect. I myself have been decorating buildings of various sorts for many years, but I have never once collaborated with the architect. I do not know what conclusion one must draw from that! There is a growing school of young painters, and if architects would give them a chance I think something fine would come of it.

The PRESIDENT: We have, I understand, twelve or fifteen leading foremen of our great London builders, and it would be interesting for us to hear their candid views as to what they think of architects and craftsmen.

Mr. L. T. BUCKLEY: As a foreman, I would like to say that often we see things which come to us in sections and drawings which it is practically impossible to carry out. We often point it out to the architect, and he says, "Haven't you common sense enough to design it yourself?" That has often been my experience of what has happened in a large building.

Mr. W. H. ANSELL [F.]: We have had the thoughtful papers of Mr. Bayes and Mr. Turner pointing out to architects the way they should go. Whether they have gone in the past directly as one would wish is another matter. But there is one thing that has not been mentioned which will have a potent influence in the future on the co-operation of architects and craftsmen, and that is the present system of architectural education. Up to the end of the last century the pupilage system was universal. The general trend of architectural development was very varied. One man went to the Cots-

wolds for his vernacular, and a very fine English thing he made of it; another was bemused with the gables of Bruges, while others brought the towers of Toledo to London. Then there arose a prophet in the land who said "All this leads nowhere; what we want is some agreement which will result in a body of architects working more or less on the same lines." He advocated that a number of architects should get together, agree on a kind of building, and work at it in the hope that something would come of it. Without such an agreement the thing has actually happened; those who matter in the future are being trained in the architectural schools. Instead of 60 or 70 offices, each with a pupil and a different point of view, there are 60 pupils in the schools; what one learns they all learn, so that in future there must be a similarity of thought in design. Will it not be a great thing for the future if the present school of young architects can be brought into contact with craftsmen in a way that, I fear, they are not being brought at present? I believe that many of our younger architects are missing some of the great pleasure that we used to take in works of fine craftsmanship. We have a public which is interested in "handwork," as they call it, and that very liking for the work which is done by hand is older than any architectural fashions; it is something very deep in human nature. We have heard in this room that the craftsmen on a certain building asked for permission to take their wives and friends on a Saturday afternoon so that they might see the work. I think that is very clear evidence that the craftsman can be interested in his work. It is very important that in the curriculum of the schools there should be included some training in craftsmanship. In the old days we were told it was good for the architect to spend some time in the shops, and I think any man who did that, benefited by it. I remember working, with others, in the old School of Arts and Crafts, in Regent Street, on beating lead, casting lead, and working in other ways. There were many men in that class who are well-known to you, and I am certain their work as architects since has benefited by the craftsmanship which they themselves learnt in that cellar in Regent Street. Therefore I advocate that in teaching our younger architects we try to bring them into direct contact with craftsmanship where possible, and induce them to practise some craft. They may not be able to devote sufficient time to it to become very proficient, but they will be better men if they can use their hands, and I think it will make them better architects.

Mr. DARCY BRADDELL [F.]: There is a difference of opinion about what is wrong with the crafts. Everybody seems pessimistic; Mr. Bayes because he sees restlessness creeping into work to-day, and Mr. Turner is pessimistic because he does not like architects dictating too much. Mr. Ansell wants architects to learn the elements of craftsmanship. But I think it would be easier for the craftsman to learn the elements of architecture. I would say there are very few eminent sculptors to-day who know anything about architecture, but there are numbers of craftsmen who know something about it. Painters, especially if they want to be decorative painters, ought to know something about architecture, about spaces, and why architects want spaces. I think the training of a

sculptor does not embrace a knowledge of architecture. Why not? It is easier to train a young man in the elements of architecture than it is to train an architect in sculpture. The young fresco painter has time to learn something about architecture; it need not be a great deal, but he should know something about it. A week ago a young sculptor said to me, "I know nothing about architecture," but I think that should not be the case with any young sculptor or painter.

Mr. MAURICE E. WEBB [F.] (Chairman of the Board of Architectural Education): In connection with Mr. Ansell's remarks I would point out that the Board of Architectural Education, which controls, to some extent, the young architect's education, insists that one year out of five shall be spent on practical work. That work can take place in builders' yards, or in architects' offices, or on buildings.

With the last speaker I entirely agree. It would be a good thing from the point of view of craftsmanship if sculptors and painters spent a little time in architects' offices and schools. At present we are working in different directions, and I think architects alone are trying to interest their students in other branches of art.

Mr. H. M. FLETCHER [F.]: In reference to what Mr. Maurice Webb and Mr. Braddell said, I would like to call your attention to the work which is being done at South Kensington by Professor Worthington. Anyone who goes round the classes which Mr. Worthington is holding there and sees the work in architecture which he is getting out of young painters and sculptors will be astounded at the freshness and the wealth of the ideas. He does not profess to teach them architecture, but to show them what architecture is about, and he is very successful.

I was very much interested in the little story which Mr. Voysey told us about freedom and slavery, and it set me thinking about his remark that you cannot be a saint until you have had an opportunity of sinning; so also you cannot be free until you have had the opportunity of being bound. The trouble with his Academician sculptor was that he left him to his own devices, he did not bind him in any way. The common experience of architects is that a job in which they are left to do exactly as they like is uninteresting. But when you have conditions laid down which you have to fight against, you put your best wits into it, and it becomes interesting, and you probably do your best work on it. In the same way, the architect who goes to a craftsman should lay down certain conditions which he is to apply, and leave him freedom of action within those conditions. He should give the craftsman a rough sketch showing the kind of thing he wants, and he should never go beyond a half-inch scale in the carvings, and he should consult with the craftsman and let him have a good deal to say in regard to the sections of the mouldings. He should lay down certain conditions within which he is to work, and then he will get real co-operation, not by leaving him entirely alone to do as he pleases.

The PRESIDENT: I think we have had an enlightening and interesting discussion. I do not altogether agree with what Mr. Cresswell said. It was my good fortune, many years ago, to have to spend five years of my life in



actual daily touch with craftsmen of all sorts, and ever since that time I have had to do with them. There may be, perhaps, one intermediary, but beyond that, I am pleased to say I do not think I have ever had to do with other people before getting in touch with the craftsman. I think Mr. Cresswell has taken a pessimistic view.

I agree with everything Mr. Ansell said. I think the young men of to-day, unless they are constantly on buildings and see the work being carried out by the different workers and craftsmen, miss one of the great enjoyments of being an architect. There is nothing more enjoyable than walking round and talking with the workmen, consulting with them and asking them questions, as I always do. And every day of my life I am learning something from them. One rule which I have made in my office is, that we do very careful joinery details, but beyond the profile mouldings we do not bother about construction, because, as my friend said, and as so many shop foremen have told me, some drawings which architects send down are impossible of execution. During the five years I spent on buildings I learned a great deal about joinery; I was taught by one of the greatest men on joinery in London—he is dead now—and even to-day, when I go to the shops I go through all the details with the shop foreman, and I give him suggestions about the joinery, and he gives me suggestions also. It is the same with the masonry, with lead work, and with plastering. When it comes to stone carving, I am in the hands of Mr. Turner, I do not like to make suggestions. But the more we architects understand about craftsmanship on buildings, the better it is for our work and for ourselves.

I have the greatest possible pleasure in putting this vote of thanks to Mr. Bayes and Mr. Turner.

This was carried by acclamation.

Mr. BAYES, in the course of his reply said: You have been extremely kind in the way you have received my paper. The proposer might, I think, have told us

something about American co-operation and the reinforced concrete, about which Americans know so much.

I think Mr. Voysey's question is a very easy one to answer. The bulk of us are suffering from too much ego at present, and that is one reason I feel that working with architects is so valuable, because we should then find we are only a small note in the big harmony, and we should learn modesty. Probably the noted R.A. spoken of was having too much exhibition work, and probably if he had realised he was only a small note, he would have been able to subdue himself, and would have been a better man.

I agree with Mr. Braddell that the painter and the sculptor should learn architecture. It is the whole trouble at the present time that the stuff which is being done and claimed as great work has nothing to do with architecture and will not go with it. The best periods were those in which sculpture and painting were intimate in the work. But the question to-night was not how the sculptor and the painter can be improved, but how we should co-operate. If we had more knowledge, I know we should co-operate more easily. It is not for me to find fault with my own craft.

Mr. TURNER, in reply: I am concerned that my friend Voysey should have felt in the least hurt by what I said. When I stated that no architect should design in any material which he had not been brought up in, I meant that he must not make a photographic representation of it. If he does he is not likely to get the craftsman's representation as it ought to have been had he detailed it with his knowledge of the material.

With regard to what was said about architects *versus* craftsmen, there is nothing in my paper nor any thought of antagonism in my mind. I want the reverse. I want the architect to know the craftsman individually; it is that personal touch which I value more than anything else in this world. If you get to know a man, his ways and his capabilities, you are almost certain to get good work.



# Exhibition of Water-colour Drawings of Old Bridges in France

OPENING BY THE EARL OF CRAWFORD AND BALCARRES.

THE PRESIDENT, MR. E. GUY DAWBER, F.S.A., IN THE CHAIR.

THE RIGHT HON. THE EARL OF CRAWFORD AND BALCARRES : This gathering is brought together to see a remarkable exhibition, which illustrates in this branch of art the almost incredible wealth of the French Republic. Every type and style of bridge is represented—the Pont Du Gard, that astonishing bridge in the South of France with Roman terminal archway at either end, and the Albi bridge at Cavaillon, and the bridge with the great pilasters over the small canal at Toulouse. I think it is a very interesting fact that the French, who possess this marvellous collection of bridges, should have arranged, by the co-operation of Professor Emerson and others, to produce a work in our language illustrating this branch of architecture. I am told that Professor Emerson's book is being largely purchased by engineers in the United States of America ; that is a very interesting and a very significant fact. I sometimes wish that our engineers took more interest in the æsthetic side of architecture, just as engineers are alleged to wish that architects took more interest in the engineering problems. However, the United States' engineers show a praiseworthy interest in the æsthetic value of bridges by having ordered a large number of copies of the book.

But to us the interest of this exhibition is by no means confined to the purely æsthetic values, as shown in this remarkable series of water-colours and measured drawings. We wish, if possible, to apply the moral to ourselves. I do not think that, in this country, any of us would claim that we possess a series of bridges so remarkable for antiquity, for variety, for ingenuity and for resource, as that by which we are surrounded, but at least we have got our own heritage. I hope that a result of this exhibition will be to draw attention to what, I suppose, may be called one of the most romantic features in architecture—romantic, of course, because a bridge is about the only building in which it is not necessary for the architect to place a room, which must be very consoling to the architect. But though our wealth can scarcely rival, or even correspond with, that of France, we have our own bridges, and in this country, I think, our bridges are more threatened than anywhere else on the continent of Europe. The new demands of motor traffic place upon county road surveyors and their committees a very facile temptation to remove or to mutilate old bridges and to replace them by others more convenient for fast motor traffic, or for heavy wagons. In some counties striking efforts are being made to avoid this disaster. Herefordshire is a county exceptionally rich in small bridges of the seventeenth century ; and their county council and their road surveyors are taking special care to preserve them, and still more to prevent their mutilation and destruction in order to add facilities to motorists. The Ministry of Transport has shown itself

most friendly in trying to preserve our old bridges ; in some cases they have gone so far as to duplicate the grant offered by local authorities from the Road Fund which the Ministry of Transport controls, in order to prevent the loss of an old bridge. We cannot exaggerate our debt of gratitude to the Ministry of Transport for its good offices in these matters. There are other bridges towards which I could wish the Ministry of Transport might be inclined to show a little more activity, namely, the Bridge of Waterloo, which, although modern, can, for its grandeur and its statuesque lines, compare not unfavourably with some of the most famous and characteristic bridges of France.

I hope that this exhibition, interesting in itself, will have a repercussion in so far as it affects our own problems at home. There is a strong movement afoot, to which, I am glad to say, our President is contributing from his fund of experience and from his position as President of the Institute and from his large knowledge of men and affairs—a movement to try to unify, to coalesce, and therefore to strengthen all those societies and movements, of which there must be a large number, the object of which, in one form or another, is to preserve the beauty and amenity of our country. One of the objects clearly is to maintain our bridges, certainly one of the most charming elements of architecture, something which joins one county to another, one side of a little stream to the other, which is like a beautiful marriage. A beautiful bridge is, and should be, preserved intact for all time. But let me add this, in conclusion : We shall not preserve our ancient bridges in this country, or our old churches, or our old buildings, or the natural beauties of our countryside, without a great and sustained effort. Public opinion to-day is, I am sure, more sympathetic, more ready to do the right thing, than at any previous moment in our lifetime. But, at the same time, the forces of danger are more powerful, are better equipped, and in some ways (shall I say ?) are more unscrupulous than ever ; and we are now approaching the time when in this country we have got to have a stand-up fight against the forces of ugliness. We have got to equip ourselves efficiently and vigorously for the campaign which is about to open. We can enter upon that campaign with the knowledge that our cause is good, that nobody dares to oppose us, but that, none the less, through ignorance, through apathy, through neglect—often through neglect of our own friends, these dangers are imminent, and, unless strongly opposed, will win the day through error or omission on our part.

I am particularly glad that this exhibition should take place here, not merely because the works are charming as works of art, but because it is good that such an exhibition should take place under the auspices of the



Institute, still more, under the guidance and direction of Mr. Guy Dawber, who, as I say, is taking an active part in a movement which will be fruitful in this country, which will not merely tend to preserve the bridges which we have inherited and of which we ought to be proud, but which will go very much further and do much to preserve the beauty of the countryside as a whole.

The PRESIDENT : I am sure we are all very much indebted to Lord Crawford for his interesting address. I thank him for all the kind things he has said about the Institute, and with regard to what the Institute is going to do in the matter of the preservation of rural England. It is a subject which I have very deeply at heart. The subject with which we have to deal to-day, however, is this exhibition of pictures of bridges of France, for the collection and arrangement of which we are indebted in great measure to Mr. H. M. Fletcher. I hope it will become thoroughly well known and advertised, so that all our members will be able to see it, and not only study the beautiful water-colours, but also the charming measured drawings. I quite agree with what Lord Crawford said, that we in England have not such magnificent examples as the French bridges, with the exception of Waterloo Bridge ; but in England we have a unique collection of smaller bridges many of which, with the present movement for widening roads and making new great arterial roads, will have to be sacrificed. We should therefore get up some campaign by which our local societies affiliated to the Institute might have all the bridges carefully measured and catalogued. For instance, there is one that we can all call to mind, the delightful pack-horse bridge at Haddon Hall. I do not think that has ever been measured or published. There are many in Herefordshire and Berkshire, and several in Norfolk. We can all call to mind these small bridges, and I throw out the suggestion that drawings might be made of these small bridges throughout the country, before they are destroyed.

It has been a very great pleasure to all of us to have

Lord Crawford with us to-day. He is, and has been for many years past, one of the Institute's best friends, and I am sure, from what he once said to me, that we shall be able to count upon him in the future. It is a great pleasure to me to put this vote of thanks to you.

Mr. H. M. FLETCHER [F.] : I had no idea I should be called upon to speak, but I have great pleasure in supporting the President's thanks to Lord Crawford for his very interesting speech. May I say a little about the book, *The Old Bridges of France*, which is the subject of this exhibition. It is written by Professor Emerson, of the Architectural Department of the Massachusetts Institute of Technology, and Georges Gromort, whose name the public know as the author of excellent works on the renaissance of architecture. About thirty years ago they were both pupils of Laloux, in Paris, and they have remained friends ever since. Professor Emerson has visited France every summer for some years, and they have collected the material. The water colours are by Pierre Vignal, who died last year, fortunately having been able to complete what they wanted of him. They are very beautifully reproduced in the book. I wrote and congratulated Professor Emerson on the beauty of the reproductions, and he replied saying he was glad I liked them, because he himself did not think they did justice to the originals. Now that we have the originals, which he has kindly sent over from America, one sees that they are somewhat coarsened in the reproductions. They are extraordinarily fine reproductions of water-colours, done in Paris, and I doubt if they could have been equally well done in any other place in the world. But when you compare them in detail with the originals you see they are hotter and more glaring and less subtle. The line drawings, of course, reproduce better, but even there one gets a great deal more from the originals which have been lent than from the reproductions in the book. I would like to add that the book has been presented to us by the authors. Professor Emerson is one of our Honorary Corresponding Members in America.

## Reviews

ARCHITECTURE EXPLAINED. By Howard Robertson, F.R.I.B.A., S.A.D.G.

At a time when the public interest in architecture is increasing, *Architecture Explained*, by Howard Robertson, is a most seasonable and excellently written book which is calculated to stimulate the layman and the architectural student alike.

The author handles the subject with a wide sympathy of outlook, although it is evident he has grown up in an atmosphere of a classic rather than a Gothic character, and the value of balance, symmetry, and axial planning, in consequence, receives more attention than some architects would be inclined to allow. Yet Mr. Robertson is most fair in what he has to say in favour of Gothic and evidently believes that the great difference between Gothic and classic consists in that the former is designed from within outwards and the latter from without inwards. That is to say, requirements of plan in a Gothic building are allowed to dominate the desire for symmetry, whereas symmetrical balance in a classical design is often seen to dominate the plan.

Our author quite rightly insists that good architecture must grow out of requirements and conditions, and depends very greatly on personal character. The importance of temperament, especially shown in Gothic, is well emphasised and the materialism of Rome forcibly expounded.

In speaking of "needs," he says, "We do not imply any limitation to what are recognised as purely material needs. There is an æsthetic, a spiritual, a moral need which is almost equally urgent. It is the demand of the mind and intellect for something satisfying, something which comforts and pleases, something which inspires and stimulates." As there never could be any fixed standard of proportion or of beauty, each man must make his own according to his own personal character and culture.

We find on page 147 most excellent teaching on the question of critical observation and a little farther on (page 152) interesting observations dealing with honesty, the avoidance of shams, and the motives that lead to them. Mr. Robertson always tries to get to the root of things and emphasise the fundamentals.

Insisting on architecture as a living and ever-developing art, "Character," he says, "after all, makes a more enduring appeal than beauty of form, probably because it is essentially of the spirit rather than of the flesh. And in building, a human art, it is the character, the impress of personality, which makes the difference between cold masonry and living architecture" (p. 119).

In addition to this philosophic aspect of architecture, there is a great deal of practical value in the book, helping both professional and lay minds towards an intelligent classification and analysis of the grounds of taste.

To gauge the value of uniformity in street architecture (rather overvalued), we need but recall the charming streets of Holland, where each house is different, yet stands politely and, indeed, respectfully by its neighbours. A good building cannot be made less so by the vulgarity of its neighbours. Mr. Robertson, however, clings to uniformity in a way that would bring tears to any Gothic eyes.

"It is generally accepted that Nature is an artist, and that Nature's manifestations are always beautiful and artistic." So says our author. But we beg respectfully but emphatically to disagree with him. Art, as we understand it, is the manifestation of human thought and feeling, and therefore wholly human; all those who believe in a creator, regard Nature as divine. But man sees so little of the purposes of creation that he names one thing ugly and another thing beautiful.

There is in *Architecture Explained* a charmingly bold and healthy criticism of modern work by living men, quite free from personalities or bitterness. It is perhaps regrettable that while speaking of notable American architects the name of the late Mr. Goodhue is not mentioned.

Though speaking of architecture as the "mistress" or "sister" of the arts, we cherish the belief that our author regards architecture *not* as the "sister," still less the "mistress," but truly the *mother* of them all.

C. F. A. VOYSEY.

KETTRIDGE'S TECHNICAL DICTIONARY. *La.* 8vo. 1925. [George Routledge and Sons, Ltd., London.]

Messrs. George Routledge and Sons have recently published a new French-English and English-French dictionary of technical terms and phrases used in civil, mechanical, electrical, and mining engineering and allied sciences and industries. The author is Mr. J. O. Kettridge, and the translations consist of one hundred thousand words, terms and phrases. Although there is no special section devoted to architectural terms, architects who are engaged on work in France or who wish to translate terms used in building operations will find much that is helpful in the dictionary, because a considerable number of terms which are used in mechanical and civil engineering work also include terms used in building and in the work of carpentry and joinery, lighting and heating, etc. The ideal technical dictionary of architecture in foreign languages may have yet to be compiled, but Mr. Kettridge's book is a milestone on the way.

W. P. STEEL.



YEAR BOOK OF THE ARCHITECTURAL LEAGUE OF NEW YORK, 1925. *Presented to the Royal Institute of British Architects from the American Institute of Architects (D. Everitt Waid, President), and the Architectural League of New York (Harvey Wiley Corbett).*

The Architectural League of New York has its counterpart in the Architecture Club of London. An exhibition is held annually for the dual purpose of offering to architects and those in the allied arts the opportunity of presenting their work to the public. The nature of these exhibits, which range from buildings to mural decorations, is set forth in the handsome volume presented to the Institute by Mr. Harvey Corbett on the occasion of his recent visit to this country. As we turn over the pages the fact is brought to mind that Europe has supplied many ideas to America. There are small houses from England and Italy, monuments from France, plaques from Greek vases and elevations derived from every known classic source. It is encouraging to see how America, with her vast wealth and resources, in matters of art is no better than she should be. Her artists have experimented with the historic styles and, although they have achieved a uniform standard of expression for public buildings, it cannot be said that vital contributions to the art have been forthcoming. There are few plans in this volume to show the technical considerations which are so delectably cloaked with historical fragments. As decoration the works exhibit skill which is absent from English works of similar character, but the critic experiences a sense of disappointment. The Mellon National Bank with its imposing interior of Ionic columns recalls a Roman basilica, while the State Building, Civic Center, San Francisco, recalls the character of the Farnesina. The design of the immense Broadway Temple, and the equally tall Shelton building, New York, indicate that American architects are beginning to understand the tyranny of copybook methods.

Other evidence of the departure from the Beaux-Arts doctrines of the last century is afforded by the grouping of the Nebraska State Capitol and the equally interesting "Cathedral of Learning" for the University of Pittsburgh. There are, however, a few designers who still reverence the Pantheon and the Roman Thermæ. Within the last thirty years America has been studying and selecting. Her architects have not spared themselves, and very rightly, in investigating the technique and the effect of past styles. There have been attempts, not without success, to found an indigenous expression. This has implied a slight reluctance to overthrow derived forms representing the historical sequence of architectural art. But notwithstanding the feverish activity of our American architects, the tendency is to produce novelty based upon tradition,

the change, long desired, has been wrought by the conditions of life which are so dissimilar to anything on this side of the Atlantic. This conflict of opinion in architectural circles is most marked when such designs as the Barclay-Vesey Telephone Building, New York, is contrasted with the new Devonshire House design now building in London. On the decorative side the mural paintings have none of the simplicity of the panels designed by Puvis de Chavannes, nor the breadth of handling shown in the work of Frank Brangwyn. The decoration for the Brooklyn Masonic Temple suggests a composition of architectural details by a student. The chief reason for the failure to produce convincing mural paintings is the present inability of American artists to conventionalise in a decorative way. In other branches of architecture, such as the building of churches, America is still imitative. There is a strangeness about the Gothic essays, which for the most part lack inspiration. The same criticism can be levelled at the classic compositions, many of which could be attributed to the architects of the early nineteenth century. In sculpture America is sadly in need of a leader. Such is a summary of the evidences of architecture and the kindred arts as set forth in this attractive volume. Whatever one's personal opinions may be, there is no denying that American architecture possesses certain qualities which are well defined. Apart from the towers of commerce the buildings have a well regulated sense of scale, the surfaces are maintained free from hotch-potch ornamentation, the craftsmanship is good and the materials suited to the locality. The wide diversity of the buildings has evolved a technical system which, handled in the right way, could be used to achieve pictorial results denied to the architects of any other country. In America the public have an appreciation for fine building as distinct from mere building. There is a tendency, however, to over-enrich interior work and to regard lavish display as a social value. No other policy but that of experimenting with traditional styles, or a corresponding eclecticism, could have been pursued in a country made up from the peoples of many nations. On the technical side there is much to be learnt from America; on the decorative side there is a danger of recopying motifs already copied from Europe. Is it not significant that no other country but England has shown an aptitude for following America in architectural thought?

A. E. RICHARDSON [F.].

FRENCH PROVINCIAL ARCHITECTURE *as shown in various examples of Town and Country Houses, Shops, and Public Places adaptable to American Conditions.* By P. L. Goodwin and H. O. Milliken (American Architects). [B. T. Batsford, Ltd.] Large quarto, £3 3s.

With many of us—unfamiliar, perhaps, with provincial

France—there is a tendency to form judgment of French Architecture by, on the one hand, that country's remarkable early Gothic cathedrals and churches, and, on the other, its palace and château architecture—particularly of the florid and grandiose phase associated with the periods of, say, Francis I. and Louis XIV. A judgment so formed would, of course, be entirely misleading, for it leaves out of account the immense importance and interest of the simpler and more natural examples of building found in or around the smaller towns and villages. Such less obtrusive works are, in any country, more truly representative of the needs and point of view of the general population and must on that account make a more widespread appeal than the few ambitious works of highly placed or wealthy individuals. In this respect the old provincial architecture of France is—despite its wide range of variety—as distinctive for that country as that of which we have ourselves good reason to be proud. It is, in fact, only by acquaintance with what may be called ordinary, everyday, building, of the kind to be found in rural areas rather than in cities, that we arrive at the character and outlook of a people in so far as architecture is able to explain them.

To assist in such an interpretation is, presumably, one object of this well-produced and illustrated volume; or, as stated by its authors, to present to the American public examples of French provincial architecture likely to be interesting from the American point of view. The period covered is broadly limited between the late sixteenth and eighteenth centuries, and the examples shown in the 94 photographs, and 40 drawings made to scale, are stated to include large and small town houses, cottages, shops, public places, gardens and fountains; but, as a number are illustrated by several plates, the examples shown are not many, and, in relation to the comprehensive title of the work, are far from being diverse. Within such a limitation, however, they vary from such fine things as the Manor of Canapville (Calvados) with its combination of timber construction, fine masonry, tiled roofing and thatch to such relatively dead formalism as is shown in the No. 2 Avenue de Bois-préau, Malmaison, of a more recent day. Several buildings illustrated are of real simplicity and beauty, such as those of the Manor of Vonne, near Artannes (Indre-et-Loire), with its splendid and characteristic stone walling and handsome chimneypiece; the outbuildings of the Château of Sauméry (Loir-et-Cher), of a classical distinction of proportion and treatment, showing the typical French method of roofing, yet devoid of the orthodox or hackneyed ornaments associated with so much Renaissance building; and a charming Town-house at Autun (Saône-et-Loire). Two views are given also of the tolerably well-known work left by the Cardinal of that name, at Richelieu. Geometric drawings interspersed with the views are useful in interpreting the technique of some of the examples shown, but one feels that both the range and the choice of subject do inadequate justice to the variety and excellence of French provincial architecture. Having said this, one can still safely hazard that this handsomely produced volume will be welcomed by those specially interested in a phase of building that is, at present, none too well covered by books in our language. The separate numbering of the

intermixed photographic plates and geometric drawing seems a quite unnecessary complication.

F. R. HIORNS [F.].

VIGNOLA. *The Five Orders of Architecture according to Vignola, arranged by Pierre Esquié. Consisting of 6 plates, including studies of shadow projection, and 2 pages of text. [Edited with Notes on the plates and Glossary of French and English terms, by Arthur Stratton, F.R.I.B.A.]. Royal quarto. J. Titan and Co. 14s.*

It is as difficult to reconcile the architect of the archetypal Jesuit church of Gesù with the author of the *Regola delle Cinque Ordini* as it is to estimate the extent of Vignola's influence in the transformation of Classical Renaissance into its last phase of anti-classicism. Thus some see in Jacopo Barozzi da Vignola one of the real authors of the Baroque, and others, the protagonist of the great period of the Renaissance, the upholder of the classic tradition of Bramante. Certainly it is the pure classic aspect of his genius which has actuated his modern disciples, through the medium of the famous work that has been for so long the standard copybook of the French and American architectural schools.

The fact that English taste found a model in Palladio is largely due to quite fortuitous circumstances, and not to any logical development of architectural study. English versions of both Palladio and Vignola appeared in the second half of the seventeenth century, the former with only two years' priority; the classical ambition of architecture in England during the succeeding century was essentially the development of an amateur enthusiasm for Vitruvius for which Lord Burlington's own enthusiasm for Palladio was directly responsible. The fashion of Palladianism is really rather unfair to Palladio himself but his is one of those names that stick, and in which all originating significance becomes lost in generalisations. Palladio, to say nothing of Vitruvius, becomes lost in the "Italian style." Had he been dubbed "Vicenza," after the manner of his contemporary, one wonders if architectural history might not have been rather different. Nevertheless, Palladio was certainly more likely than the far more scholarly Vignola to inspire the amateur and the dilettante. Sir Reginald Blomfield has remarked that Palladio was "as intent on his public as on his art." Vignola's one aim was to interpret Vitruvius faithfully wherever possible by reference to the finest ancient examples still existing in Rome. His modern academic status is well justified.

The bibliography of architecture, to which the Librarian's paper† on the Library and Collections of the Institute is an invaluable introduction, is a vital part of its history, and Vignola's "Five Orders" must always hold prominent rank. It is more than merely interesting to remember that Alberti, the first of the great Italian architectural exponents, published his book a year earlier than the *editio princeps* of Vitruvius. Next follow Serlio, whose work was destined to be the first real work on architecture to appear in England; and then Vignola.

† R.I.B.A. JOURNAL, Dec. 4 and 18 1920.



himself, who anticipates Palladio's "Four Books" by some seven years.

An English edition of Vignola has not been available in this country for several years. The American versions can hardly be described as satisfactory, and to meet an obvious deficiency Messrs. Tiranti have re-issued the plates by the veteran Pierre Esquié that form the standard French edition and represent the successive revisions of the original work at the hands of scholars of all nations. Though primarily intended for students, this is a workmanlike presentation of Vignola that architects in general will be glad to have, either for passing reference or for definite practical use. The only actual need for individual editions of so universal a guide lies in the French text engraved on the plates, which is apt to be rather bewildering to the English student, and is, in cases, out of date. Mr. Arthur Stratton has embodied a discriminating translation of this text in his own explanatory notes to the several plates, for which students should be grateful; what is perhaps even more useful is the comprehensive glossary of French and English technical terms, for the precise meaning of which we might search the average dictionary in vain.

The editor claims in his Preface that "the format of the original Italian work has been improved by modern methods." We should be careful not to infer from this that Vignola's original plates leave anything to be desired in either their delineation or their engraving. On all counts the first edition of Vignola's treatise is a book to be prized.

MAX JUDGE.

**SPECIFICATION.** *For Architects, Surveyors, Civil Engineers and for all interested in Building.* Edited by Frederick Chatterton. Under the Architectural Press. 1926. 10s. 6d. net.

The twenty-eighth yearly issue of "Specification" has appeared; a useful and on the whole a reliable publication. It is not only much enlarged, but it is evident that serious attempt is made to keep it reasonably up-to-date. For instance, the short but valuable article upon Empire Timbers by Dr. Chandler of the Imperial Institute gives record of the latest investigations carried out by the Imperial Institute Advisory Committee on Timbers, as to the timber resources of the Empire, a work which was initiated by its late director, Professor Dunstan, in collaboration with three members of the R.I.B.A.

On glancing through the volume we noted certain points of detail which seem to require further elucidation. For instance, on page 391, clause 10, what is the reason for the "shallow rebate at the back edge of Architraves making good with plaster." This almost suggests at the pernicious practice of bringing wet plaster into contact with joinery were a thing of no particular moment, it perhaps we have misunderstood the clause. On page 194, clause 5, Portland cement is suggested for the setting of stone, but surely an exception should be made in the case of Portland stone, which is often badly stained by contact with Portland cement. Clause 12 on page 79 deals with the reinforcing of brickwork, but there is no suggestion as to what is most suitable for such reinforcement.

However well a book like this is edited it has to be read

with caution by the inexperienced. For instance, it would not do to extract for use just as it stands clause 75 on page 86, which commences as follows "oversail where possible to support concrete floors, etc., etc.," this use of the words "where possible" is quite a common but questionable specification phrase. The architect might find that a conscientious builder having built his oversail, "where possible" caused them to appear below the ceiling of a room where no covering cornice was intended, or was possible. Then the preceding clause 75, page 86, refers to relieving arches being built "where practicable," another questionable but usual phrase. There is no suggestion to guide the poor builder what to do when he finds it "impracticable." A cross reference in the specification to an alternative method to meet the case is desirable. There is no adequate reference under Slating Materials to the Cumberland and Westmorland slates. This should be rectified in the next edition. Some of the best slates in the country come from the Elterwater, Buttermere, Tilberthwaite and Burlington quarries.

Of course, it cannot be expected that a publication such as this should contain many of the points which are to be found in the specification of architects who are keen on their work, nice points the result of long experience. For instance (1) as a precaution we have always considered it desirable to insert a clause that when setting out the sizes of doors if enough width is not available for an architrave of full width to be fixed on both sides, the matter must be reported at once to the architect; (2) again in the use of partition blocks, matured as distinguished from new or green blocks should be specified as a safeguard against shrinkage; (3) the architect should specify that he or his representative should see the metal templates for plaster cornices before they are run: it is not an altogether unknown experience for an architect to find a cornice has been run inside out or upside down, possibly an improvement of the design to anyone but the architect himself; (4) a clause to prevent heating radiators being fixed before the wall surface behind is painted or otherwise finished is desirable; (5) the advisability of requiring the contractor to employ a sweep to sweep all flues and to give a certificate that they have been done properly, and so on and so on.

We have made these criticisms because "Specification" is already a good and helpful publication and in the hope that future editions may be still further improved.

W. E. VERNON CROMPTON [F.].

**MODERN BUILDING PRACTICE.** By William Harvey. 80s. Lond., 1925. 5s. [Architectural Press.]

This is a useful book, being Volume II. of the "Little Things that Matter" series.

It deals with—

1. The site, aspect, subsoil, excavation and deposition of soil, paths and gates.
2. Country methods of sewage disposal.
3. The house and household stores, saving steps, used or waste space.
4. Ventilation without draughts; windows and flues.
5. Keeping out the weather; the surfaces of exterior walls.
6. Leaky windows and doors.
7. Reinforcement in general practice.

On all these subjects Mr. Harvey gives useful information, and the illustrations are clear and explicit.

H. D. S.

# Waterloo Bridge

## Debate in the House of Commons

On the evening of 18 May an animated debate occurred on the second reading of the London County Council (Money) Bill, which authorised the expenditure of money for the reconstruction of Waterloo Bridge.

Colonel Gretton (Burton, U.) moved an instruction to the Committee on the Bill to delete the item in the first schedule which authorised the expenditure of money for the reconstruction of Waterloo Bridge. There was a great tendency in these days to look at everything from a purely utilitarian point of view, and it would be a national calamity if a bridge of such beauty, fame and associations were destroyed unless it was absolutely necessary. The problem of Waterloo Bridge was part of the whole question of the traffic crossing the river. The contention that the bridge was too small for the traffic crossing it was disproved by the fact that that traffic had been from 14 to 15 per cent. less in recent years than it was in 1913. A large number of engineers of eminence believed that it was possible to underpin the piers of the bridge and preserve them as part of the structure. Mr. Dalrymple-Hay, an engineer of great experience, was prepared to stake his reputation on this, and contractors of eminence were ready to carry out the work as he had planned it. The London County Council had abandoned their original scheme of reconstruction and were now proceeding to call for competitive designs for an entirely new bridge. It was not known what the cost would be, but about £1,500,000 had been spoken of. There was a very strong case for believing that the present bridge could be preserved. The problem of traffic across the Thames was not to be solved by a new and wider Waterloo Bridge. Something would have to be done to provide an alternative means of crossing the river between Waterloo Bridge and Westminster Bridge. He urged that an inquiry should be held by the Government into the whole problem so that it could be dealt with on the broadest lines.

Sir M. Conway (English Universities, U.), who seconded the motion, said the bridge which the House was discussing was designated Waterloo Bridge by Act of Parliament, and was erected as a memorial of the achievements of the British Army in the campaign which ended at Waterloo. A more miserable proposition than that of knocking down this national memorial which had been erected by our ancestors was never laid before the people of this country. Waterloo Bridge, besides being sentimentally sacred to the people of this country, was also the finest architectural achievement of the nineteenth century, not only in this country, but in all Europe. As a memorial to the skill of hand of the masons and other craftsmen of one hundred years ago it ranked highest among all the works existing in this country. London was threatened with what he regarded as three calamities—the building of a bridge at St. Paul's, which would be a real danger to the Cathedral, the destruction of Waterloo Bridge, and the further postponement of dealing with the real crux of the problem, the building of a bridge at Charing Cross. For these reasons he supported the proposal for the appointment of a Commission of Inquiry by the Government.

Sir C. Cobb (Fulham, W., U.), speaking for the London County Council, said that after two years' consideration of the question, consulting eminent engineers, and receiving deputations the Council came to a final conclusion at the end of last year, by the overwhelming majority of 82 to 32, that the only course they could safely take was to pull down Waterloo Bridge and erect a new one in its place. He had voted in the minority because he then believed it might be possible to reconstruct the bridge exactly as it was now, but he had been forced

since to change his mind. The bridge it was proposed to build would carry six lines of traffic instead of the three lines of the existing bridge, and as it would have five arches instead of the eight of the existing bridge, the river traffic would be made more easy. The cost of the new bridge would be a little over £1,250,000. The cost of reconstructing the bridge would be £998,000. Unless the Council got the money under the present Bill it would be very difficult for them to deal with the necessary repairs in the coming year.

Mr. Gosling (Whitechapel, Lab.) opposed the motion. He said the modernising of the river had been so great during the last thirty years that it carried a very different kind of traffic from that which was known when the bridge was built. Although he yielded to no one in his admiration for the bridge, he would prefer to see it across some other part of the river, and would support its transportation, if it were possible, to the higher reaches. To widen the bridge would make navigation for practical purposes impossible. He thought the House would let the London County Council do its own business in its own way.

Sir J. Simon (Spen Valley, L.) said that Waterloo Bridge was charge of the London County Council, but was a great national monument. Once there was really a preponderating authoritative judgment expressed that the bridge could not be preserved without wholly disproportionate and practical inconvenience or fearful expense he would acquiesce. But he was not prepared to accept the suggestion that it should be pulled down until that situation was really established. He had the agenda of the County Council for 15 December last. A sub-committee specially appointed had had before it the traffic considerations in great detail as the views of a number of experts, and they reported that "counting all the engineers who had first and last made considered reports on the subject, technical opinion is as equally divided as is possible with regard to the practicability of maintaining the existing structure." The sub-committee further said: "If it had been possible to maintain by any means the existing structure we think the Council might well have been willing to sacrifice a valuable traffic improvement to the preservation of so beautiful and famous a bridge." They recommended to the Council that the First Commissioner of Works should be asked whether the Government would be prepared to set up a technical commission to inquire whether the Council could safely undertake the underpinning of Waterloo Bridge, so as to preserve it in perpetuity in a condition to take the traffic which might be expected to make use of it, and if the answer was in the affirmative to recommend what method of underpinning should be adopted, and what would be the probable cost. That being the report and the recommendation of a sub-committee specially selected for the purpose, it was rather a strong order to be told within a few months that there was nothing for the House of Commons to do but to grant permission for the bridge to be destroyed.

If this was an ordinary municipal matter they ought to pay the closest attention to the view taken even by a majority of the County Council, but after all Waterloo Bridge was not a municipal adjunct. It was a national monument, and unless it could be shown that it was not possible to save the bridge without inflicting intolerable inconvenience upon traffic and life, then most undoubtedly the overwhelming feeling of the people would be that the bridge ought to be saved. He could not imagine anybody coming with a proposal that they should get authority to pull down Nelson's column in Trafalgar Square, and yet Waterloo Bridge, opened in 1817, was at the



me, and it was to-day, a great national memorial of an age that had gone, which at that time was regarded just as much as embodying the sacrifice and the relief of this country as the Cenotaph in Whitehall was regarded by the present generation. Whatever might be the wisdom of the County Council, it was quite certain that once they pulled the bridge down they would never be able to give them again a memorial of that age. He would not think that they ought to approach this matter in any other spirit than that in which they would expect the County Council of one hundred years hence to consider a proposal on the ground of traffic inconvenience or what not to remove the Cenotaph from Whitehall. What would be thought of a House of Commons of which it could be said, "You did not think it necessary to get rid of Charing Cross railway bridge but you pulled down Waterloo Bridge instead"? It could be a mistake if the House gave an authority which, once given, could never be withdrawn, and authorized a destruction which hereafter they might bitterly regret.

Sir H. Jackson (Wandsworth, Central, U.), speaking as a member of the London Traffic Advisory Committee, said it was decided that the problem of Waterloo Bridge should not be treated as an isolated problem of a single bridge. The traffic over Waterloo Bridge had decreased 14 per cent. since 1913, and at present only 6 per cent. of the tonnage passing over the seven bridges in the Inner London zone passed over Waterloo Bridge. The reason was that the bridge had now for a considerable time been avoided, and traffic which should have passed over Waterloo Bridge had been diverted to Westminster Bridge. If they compared the traffic passing over Westminster Bridge in 1913 with that of 1925, from 8 a.m. to 8 p.m., they found that the vehicles had increased by 82 per cent. and the tonnage by 87.6 per cent. While there was no fear or anxiety as to Westminster Bridge at this moment, he asked the House to contemplate what might happen if the strain on Westminster Bridge became too great. The presence of the County Hall and St. Thomas's Hospital at one end of the Bridge practically made it impossible to put by their side any such temporary arrangement as that at Waterloo Bridge. Therefore, the Traffic Advisory Committee looked with great anxiety to the future of Westminster Bridge, because of the possibility of its being overstrained and the impossibility of giving it relief.

Sir W. Bull (Hammersmith, U.) said Waterloo Bridge ought to be repaired and retained as a memorial of the Battle of Waterloo. A bridge which provided for six lines of traffic would make navigation at this part of the river more difficult than it was at the present time.

Mr. Scurr (Mile End, Lab.) said that as a Londoner he was proud of Waterloo Bridge, but beauty must depend on its utility. Some years ago Temple Bar was removed on the ground that it was obstructing the traffic, and the same considerations applied with even greater force to Waterloo Bridge.

Mr. Rye recalled that of the six skilled experts called into conference by the learned societies, five declared without hesitation that the bridge could be underpinned, and only one supported the view of the adviser to the London County Council.

Sir G. Hume (Greenwich, U.) said the London County Council had been forced step by step to realise that the question of Waterloo Bridge had to be dealt with.

Mr. Harris (Bethnal Green, S.W., L.) said that as a member of the London County Council he voted with the minority, and with him were Sir G. Hume as well as Sir C. Cobb. Sir G. Hume said he voted with the minority because he wanted to give public opinion one last chance.)

Mr. B. Smith (Rotherhithe, Lab.) also opposed the motion. Lieutenant-Colonel Ashley, Minister of Transport (New Forest and Christchurch), said the attitude of the Government was that this was a matter the responsibility of which must be shouldered, and should be shouldered, by the London County Council. It was not a matter of such public importance as

to make it necessary for the Government itself as a Government to intervene. The statutory duty of looking after certain bridges in the Metropolitan area had by Parliament been put upon the London County Council. By law they were the guardians of these bridges and were responsible for their upkeep and their reconstruction. The London County Council was a popularly elected and very important body second only to Parliament in that area. He put it to the House that it must envisage a very important decision if it deliberately rescinded a decision of the County Council on such an important matter. It was not outside the power of the House to do so, but it must consider the responsibility it would take if it overrode a decision specifically put by law on the shoulders of this great democratically elected body. If the House did so, he thought it must consider whether the London County Council might not possibly look to the national Exchequer to help them. If the wishes of the County Council were turned down and their views as to the ratepayer's money were not allowed to prevail, he thought the House might find itself in a difficult position as regarded these London bridges in the future. The decision was one for the House of Commons; the responsibility was with the County Council. But he pressed the House to consider whether they would be right in overriding the decision of a great body like the Council.

Sir W. Davison (Kensington, S., U.) supported the motion. Captain Fraser said he felt that if this bridge had not begun to subside it would not have been regarded by many members of the House as the very important national monument it was now said to be.

#### THE DIVISION.

The House divided, when there voted—

Against the motion	..	..	158
For the motion	..	..	96
Majority	..	..	62

(Report abridged from "The Times")

#### CHISWICK HOUSE.

A visit was made to Chiswick House on Saturday, 10 April 1926.

Mr. W. Ernest Lord, architect to the Duke of Devonshire, and Dr. D. Macauley, of Chiswick House, accompanied the party. Explanations were given as progress was made.

The work carried out by Richard, third Earl of Burlington in 1729, consisted of the Palladian villa which now occupies the central portion of the main building, together with the entrance hall and dining room or summer parlour formerly connecting the villa with the old Jacobean residence. The Earl employed William Kent as his architect in adopting the design by Palladio of the villa near Vicenza as the type for the Chiswick villa. The purpose of the villa was to store some of the art treasures acquired by the Earl of Burlington during his travels in Italy.

The fifth Duke of Devonshire, eldest grandson of the Earl of Burlington, soon after he came into the property in 1764 commissioned James Wyatt, R.A., to carry out works at Chiswick House, which comprised the addition of two wings, the removal of the flight of steps on the north-western front, and in 1788 the demolition of the Jacobean house, thus leaving Chiswick House as it now stands. The kitchen block and stables shown on Kip's engraving still remain in the Grosvenor wing.

The grounds were afterwards visited and the temple, obelisks, bridge, conservatory statues, etc., inspected.

FRANCIS R. TAYLOR [L.]

#### WARNING TO MEMBERS.

Members are victimised from time to time by impostors who call upon or write to them claiming to be architects in distress. Members are advised before yielding to appeals of this character to communicate with the Architects' Benevolent Society.

## LAW REPORT.

## HOUSING SCHEME : ARCHITECT'S REMUNERATION FOR ABANDONED WORK.

*Oliver v. Pewsey Rural Council.* Before Mr. Justice Roche.

This was an award by an arbitrator in the form of a stated case in a dispute between Mr. E. K. Oliver, of Bath, an architect, and the Pewsey Rural District Council as to remuneration of the architect in connection with a proposed building scheme, the main part of which was abandoned after substantial work was done in respect to plans, etc.

Mr. Schiller, K.C., and Mr. Wethered for plaintiff, Mr. Movesby and Mr. Goodman Roberts for defendants.

Mr. Schiller contended that the contract incorporated Memorandum No. 4 of September 1919 issued by the Ministry of Health, and this referred to the conditions of employment of architects or surveyors, which conditions were in accordance with those customary in the respective professions, and that in the event of work being abandoned the architect was entitled by usage to two-thirds of his professional fees.

Mr. Movesby, for defendants, argued that the R.I.B.A. schedule is divided into two parts—conditions of employment and scale of charges. In this case the scale of charges was fixed by the Ministry's Memorandum No. 4, and therefore the question of charges in respect of abandoned work did not arise.

His Lordship decided that although there were some 22 different plans, there was only one scheme so far as the question of fees was concerned, and that there should be no "rest" as provided by Memorandum No. 4 after the first 250 houses.

He also found there is a custom in the architectural profession for remuneration at the rate of two-thirds of the usual fees when work is abandoned, and in certain cases this is reduced to one-half. On the main point, payment for abandoned work, the plaintiff succeeded and was awarded costs.

W. E. WATSON [F.]

## THE WREN SOCIETY.

In a letter from Mr. A. E. Brooks, of Brisbane, Fellow of the Queensland Institute of Architects, addressed to the Secretary of the Wren Society, the writer acknowledges the receipt of the second volume of the Society's publications, and adds: "It is, like volume one, a particularly interesting collection, worthy of the man in whose honour it is issued. The subscribers are indebted to the Editors for their excellent work."

Subscriptions to the Wren Society may be sent to Mr. H. Duncan Hendry, the Honorary Secretary, 53 Doughty Street, London, W.C.1.

## ARCHITECT FREEMASONS.

At the Grand Festival of English Freemasons on 28 April the following members of the Institute received promotion:—

Mr. Henry Lovegrove (Grand Officer for thirty years), Past Grand Superintendent of Works; Mr. W. Campbell Jones, and Mr. J. E. Franck, Assistant Superintendent of Works; Mr. George Elkington, Past Assistant Superintendent of Works.

## MR. WALTER TAPPER, A.R.A.

The congratulations of members of the Institute will be cordially extended to Mr. Walter Tapper on his recent election as Associate of the Royal Academy.

Mr. Tapper was articled to Messrs. Rowell & Sons, Newton Abbot, Devon; later he became chief assistant to Messrs. Bodley & Garner. He holds the position of consulting architect to York Minster and Manchester Cathedral. Mr. Tapper had the distinction of being one of the five architects selected in open competition for the Liverpool Cathedral. He was elected an Associate R.I.B.A. in 1899 and a Fellow in 1912.

Amongst his principal works are the following:—

The Church of the Annunciation, Bryanston Street, W. the Church of the Ascension, Malvern Link, Worcester; the Church of St. Erkenwald, Southend, Essex; the Church of St. Mark's, Whiteley Homes, Surrey; the Church of St. Mary's, Harrogate, Yorks; the Church of St. Luke's, Grimsby; the Church of St. Mary's, Little Coates, Lincs; the Church of St. Mary's, Lythe, Yorkshire; the School Chapel, Guildford, W.A.; the Chapel of the Mirfield Community; the Convent, St. Alphege Southwark; repairs of many churches

Hengrave Hall, Suffolk; Bicton House, Devon Kenfield Hall, Kent; Boyton Manor, Hants; Eastham Grange, Worcs.; Shipley Hall, Derby; Turville Grange, Bucks; the Carillon Tower, Loughborough, etc.

## Allied Societies

## SHEFFIELD, SOUTH YORKSHIRE AND DISTRICT SOCIETY OF ARCHITECTS AND SURVEYORS.

The 38th Annual Meeting of the Society was held at the Sheffield University on Thursday, 22 April, when the following officers were elected:—

*President*: Mr. F. E. P. Edwards, F.R.I.B.A.

*Vice-President*: Mr. C. M. Hadfield, F.R.I.B.A.

*Hon. Treasurer*: Mr. J. R. Wigfull, F.R.I.B.A.

*Hon. Secretary*: Mr. H. B. S. Gibbs, A.R.I.B.A.

*Council*: Messrs. W. G. Buck, L.R.I.B.A.; E. V. Holmes, F.S.I.; H. I. Potter, A.R.I.B.A.; A. Whitaker H. Webster; J. A. Teather, L.R.I.B.A.; J. M. Jenkins, A.R.I.B.A.; J. C. P. Toothill, A.R.I.B.A.; F. H. Wrench, L.R.I.B.A.

## LEICESTER AND LEICESTERSHIRE SOCIETY OF ARCHITECTS.

The fifty-third Annual General Meeting of the Leicester and Leicestershire Society of Architects was held on Wednesday, 28 April 1926, at the Church Rooms, Leicester.

Mr. E. T. Allcock, F.R.I.B.A., President, was in the chair and twenty-eight members were present.

The Hon. Secretary, in presenting the Council's report stated that the membership now numbered 140, an increase of ten during the past year. Among its other activities, the Council had sent a strong protest to the L.M. & S. Railway Co. against the disfigurement of the London Road by unsightly enamelled iron advertisements fixed to the bridge.

The Hon. Secretary of the Lectures and Excursions Committee reported that during the year two Lectures and a Students' Evening had been held. The Annual Excursion took place in June and 32 members and friends visited Oxford.

The Annual Dinner was held in January. Among the guests were the Mayor of Leicester (Alderman G. Banton) an Alderman Dickman of the Notts and Derby Society of Architects.



The Hon. Librarian reported that the Society's Library now contained over 300 volumes, forming a valuable asset to the Society.

Mr. E. T. Allcock was re-elected President; Mr. A. F. Ryan, Hon. Treasurer, and Mr. C. F. McKeay, Hon. Secretary.

The following were elected to serve on the Council for the ensuing year:—

*Full Members*: Messrs. J. T. Burt, A. H. Hind, W. Keay, J. Nott.

*Associate Members*: Messrs. G. A. Cope and T. W. Haird. The Society's prize winners were:—

*President's Prize*: Mr. E. Thompson.

*Measured Drawing*: 1st prize, Mr. E. C. Mount; 2nd prize, Mr. W. E. Fancott.

*Special Prizes*: Messrs. R. K. Kinton and W. Worth.

*Measured Drawing Prize* (for full time students at the Leicester College of Art): Mr. W. E. Marston.

Three new members were elected and the meeting concluded with a vote of thanks to the President, officers and committees for their services during the past year.

## Obituary

L. J. WILLIAMS [A.].

We regret to announce the recent death of Mr. Leo John Williams at the early age of thirty.

Mr. Williams, after his school education, entered the Penrose offices of Messrs. Lowell, Drewitt and Wheatley as an articled pupil. When the war broke out he joined the 4th Cornwall Pioneer Battalion as Lieutenant. He served gallantly in France and in India and retired with the full rank of Captain. Returning home he resumed his professional career and was elected an Associate R.I.B.A. in 1921. He then secured a post under the Australian Government at Australia House and was employed on the plans for the Australian building at the Empire Exhibition. Later he entered the offices of Messrs. Hinney, Son and Hall, and remained with them until his breakdown, and returned to his home at Penzance hoping to improve his health. Unfortunately complications ensued and his illness terminated fatally.

GILBERT SCOTT COCKRILL [A.].

Mr. Cockrill died on 9 April at the age of forty-one. He was elected an Associate R.I.B.A. in 1909. His death from tuberculosis was attributable to his service in the war, in which he took part as an officer in the Royal Engineers.

FRED WALKER [L.].

Mr. Walker died on 3 April in his forty-seventh year. He served his articles with Mr. A. T. Butter [F.], of Dudley, after which he assisted many well-known architects in various parts of the country. During the war, he served in the Royal Air Force and afterwards joined the staff of Mr. F.E.P. Edwards [F.], City Architect, Sheffield. At the time of his death he was architectural assistant to the Hemsworth Rural District Council. He was elected a Licentiate in 1911.

## A.B.S. SCHEME OF PROFESSIONAL INSURANCE.

Sickness insurance to be complete must ensure a provision in the event of a permanent breakdown in health. A temporary illness may be costly, but a permanent and protracted illness may have crippling effects. The A.B.S. recommend to architects an attractive policy covering all sickness and all accidents, which cannot be discontinued by the company before the agreed age, provided the policy conditions are complied with. Disablement benefits are payable from the first day of incapacity and continue as long as disablement lasts. Please address all enquiries to the Secretary A.B.S., Conduit Street, W. Telephone, Mayfair 434.

## NOTICE.

The Editor regrets that owing to the General Strike it was not possible to publish the JOURNAL on 8 May, and that, as the printers only returned to work this week, the Report of the Discussion on the Annual General Meeting on 3 May has had to be held over until the next issue.

## FRANCO BRITISH UNION OF ARCHITECTS.

PROGRAMME FOR THE SIXTH ANNUAL GENERAL MEETING  
CANTERBURY 3 JUNE TO 6 JUNE 1926.

*Thursday 3 June*.—1 p.m. French delegates will arrive Dover (Marine Station) where they will be received by the Vice President, Sir Reginald Blomfield, R.A. and members of the British Committee.

1.30 p.m. Depart Dover for Waldershare Park (by kind permission of the Right Hon. the Earl of Guildford).

2.45 p.m. Depart Waldershare for Sturry, via Chillenden, Wingham, Wickhambreux and Fordwich.

3.30 p.m. Arrive Sturry Court, where French Delegates and members of the British Committee will be received and kindly entertained to tea by Viscountess Milner.

5 p.m. Arrive County Hotel, Canterbury.

Evening free.

*Note*.—For the information of British members it may be stated that the above arrangements are necessarily restricted to our French visitors and those members of the British Committee who will receive the party on arrival at Dover. It is hoped that British members will arrive at the County Hotel during the afternoon of Thursday, 3 June, in time to attend the annual meeting next day.

*Friday, 4 June*.—9.30 a.m. Meeting of the Bureau of the Union at the County Hotel, Canterbury.

10 a.m. Sixth Annual General Meeting of the Union.

11.30 a.m. Reception of members by the Mayor and Corporation of the City of Canterbury at the Guildhall.

1 p.m. Lunch at the County Hotel.

3.30 p.m. Members will assemble at the West door of the Cathedral where they will be received and conducted round the building by the Very Rev. the Dean of Canterbury.

4.30 p.m. The Dean and Mrs. Bell will kindly entertain members to tea at the Deanery.

Evening free.

*Saturday, 5 June*.—9.30 a.m. Depart County Hotel, Canterbury, by motor coach for an all-day excursion to Rye and Winchelsea, via Chilham, where a visit will be made to the Castle (by kind permission of E. Davis, Esq.), Ham Street, and Rye (lunch at George Hotel, 1 p.m.), thence to Winchelsea, where a visit will be made to the ruins of the Priory (by kind permission of G. Freeman, Esq., K.C.), returning to Canterbury via Tenterden and Ashford. (Price, including lunch at George Hotel, Rye, 15s.).

7.30 p.m. Congress dinner at the County Hotel (evening dress-dinner jacket), and conclusion of proceedings.

*Sunday, 6 June*.—French members will leave County Hotel Canterbury, 10 a.m. for Dover by motor coach, via Wingham, Ash, Sandwich (lunch at Bell Hotel) and Walmer, where they will be received, at the Castle, by the Right Hon. the Earl Beauchamp, Lord Warden of the Cinque Ports, prior to their departure by steamer from Dover at 5.30 p.m. (Price, including lunch at Bell Hotel, Sandwich, and return to Canterbury, 12s. 6d.).

*Note*.—For the information of British members it may be stated that any member who wishes to take part in this additional excursion should inform the Hon. Sec. (Mr. Arthur J. Davis, 22 Conduit Street, W.1) as soon as possible.

British members will proceed direct from Sandwich to Dover as the visit to Walmer Castle is by special invitation restricted to our French visitors.

P. CART DE LAFONTAINE,  
Secretary-General F.B.U.A.

## NOTICE TO MEMBERS.

## WAGES SLIPS ON TENDERS.

In 1924 the National Federation of Building Trade Employers found it necessary, owing to the conditions in the building industry at the time, to instruct their members to affix to all tenders a slip providing for adjustments to be made in the event of a rise or fall in wages. After conferences had been held, the R.I.B.A. agreed to the proposal subject to certain conditions which all members of both bodies were recommended to accept.

The arrangement made in 1924 was renewed for twelve months on 25 March 1925. The position has again been reviewed in conference with the National Federation of Building Trades Employers, as a result of which it has been agreed by the R.I.B.A. and the National Federation to continue the arrangement made in 1924 for a further 12 months until 25 March 1927.

Members of the R.I.B.A. are therefore requested to note, and are recommended by the Council of the Institute to carry out, the conditions attaching to the arrangement which has been reached having regard to the conditions in the industry at the present time. The conditions are as follows :—

That if any slips are attached to tenders they should provide only for actual wage increases or decreases to workmen employed by the contractors or sub-contractors resulting from variations in the standard rates, or consequential thereon, and not for the inclusion of overhead charges or profit upon such increases as well.

*Provided* that in the case of contracts of £2,500 or less the above variations shall not increase or diminish (as the case may be) the amount of such contracts by more than two and a half per cent. of the contract sum.

## R.I.B.A. MAINTENANCE SCHOLARSHIPS IN ARCHITECTURE.

The Maintenance Scholarships Committee have been informed by the South Wales Institute of Architects that the Council of the South Wales Institute have decided to guarantee the sum of £35 a year towards the Maintenance Scholarships Fund.

The first set of Scholarships will be awarded in June, and forms of application, general particulars, etc., may be obtained at the R.I.B.A. free of charge.

## NOTES FROM THE MINUTES OF COUNCIL.

19 April 1926.

## ARCHITECTURAL EDUCATION.

On the recommendation of the Board of Architectural Education the Council made the following decisions :—

## EDUCATION OF ARCHITECTS' PUPILS.

A suggested outline course of study for the guidance of Architects who accept pupils in districts where professional School education is not available was approved, together with two lists of books to be obtained, one by the pupil and the other by the Architect.

Copies of the outline course and lists of books are to be inserted in each R.I.B.A. Form of Articles of Pupilage sent out by the R.I.B.A.

## PARTIAL EXEMPTION FROM THE INTERMEDIATE EXAMINATION.

It was decided that partial exemption may be granted to students who produce evidence of having passed approved examinations in certain subjects in Schools University rank—viz. The General History of Architecture; The Specialised History of Architecture; The Calculations of Simple Structures.

## LECTURES ON ARCHITECTURE FOR WORKING MEN.

A course of four evening lectures on Architecture and the Building Crafts (with lantern slides) for working men is to be given at the R.I.B.A. in October and November 1926.

## R.I.B.A. PRIZES AND COMPETITORS OVERSEAS.

A scheme has been approved for holding the Preliminary and Final Competitions for the Tite Prize and the Soar Medallion or Victory Scholarship in the Dominions so as to enable overseas students to take effective part in the competitions. Arrangements on the same principle will be made for the Owen Jones Studentship.

## R.I.B.A. STUDENTSHIP.

The following Probationers were elected Students of the R.I.B.A. :—

Robert Walter Elder, "Castlewood," Greenock Avenue, Cathcart, Glasgow, Glasgow School of Architecture.

Harry Wilkinson Kelham, 28 Golders Green Crescent, N.W.11, Architectural Association.

William McCrea, c/o Brown, 8 Grantly Gardens, Shawlands, Glasgow, S.1, Glasgow School of Architecture.

Edwin Samuel Lithgow North, "Arosa," Amersham Hill, High Wycombe, Architectural Association.

James Clason Scotland, Mossgiel, Airdrie, N.E. Glasgow School of Architecture.

James West Cleland Wingate, 14 Wellshot Drive, Cambuslang, N.B., Glasgow School of Architecture.

## SPECIALISATION AND ITS EFFECT ON CRAFTSMANSHIP.

The Council appointed three representatives to serve as additional temporary members of the Architects' and Builders' Consultation Board for the purpose of holding an inquiry into the question of specialisation in the Building Trade and its effect on craftsmanship.

## LECTURES FOR ARCHITECTS IN PRACTICE.

On the recommendation of the Science Standing Committee the Council approved a scheme for a series of lectures to enable practising architects (1) to revive forgotten knowledge, (2) to acquire modern knowledge; and requested the Board of Architectural Education to formulate detailed proposals for carrying the scheme into effect.

## BUILDING TRADES OPERATIVES.

The Council accepted an invitation from the Committee of the National Federation of Building Trades Operatives to appoint a small Committee to meet representatives of the Federation to discuss problems of mutual interest which periodically arise in the industry.

## PROFESSIONAL DEFENCE.

A scheme prepared by the Practice Standing Committee for the establishment of a Professional Defence Union for Architects was provisionally approved.



## RIVERSIDE GROUND AT TWICKENHAM.

The Council received the warm thanks of the Twickenham Urban District Council for the assistance rendered by the R.I.B.A. in connection with the effort to preserve the amenities of the Riverside Ground at Twickenham.

## EXHIBITION OF GARDEN DESIGN.

The Council passed a cordial vote of thanks in favour of those who lent work for the Exhibition and of the Committee who were responsible for the arrangements.

## THE HAMPSHIRE AND ISLE OF WIGHT ASSOCIATION OF ARCHITECTS.

A revision of the rules of the Association was approved under Bye-law 82.

## COMPOSITION OF SUBSCRIPTIONS FOR LIFE MEMBERSHIP.

The Council approved a scheme for the composition of subscriptions, and directed that it should be submitted to the General Body for consideration.

## ANNUAL REPORT, ETC.

The draft Annual Report of the Council and Standing Committees for 1925-1926 was approved, together with the Ordinary and Trust Funds Draft Revenue Accounts and Balance Sheets for the year ended 31 December 1925, and the Rough Estimate of Ordinary Income and Expenditure for 1926.

## GRANTS.

The following grants were made :—

£50 to the Royal West of England Academy School of Architecture for the year 1926.

£100 to the Board of Architectural Education for the provision of additional Studio Text Books for use by the Students of Schools and Allied Societies which have an inadequate supply of text books, such grant to be for the period of one year.

£100 to the British Engineering Standards Association for the year 1926.

## APPLICATIONS FOR MEMBERSHIP.

The following applications for Membership (election June 1926) were approved :—

As Fellows, 43.

As Associates, 16.

As Hon. Associates, 2.

As Hon. Corresponding Members, 1.

## APPLICATIONS FOR ELECTION AS LICENTIATES UNDER SECTION III (f) OF THE SUPPLEMENTAL CHARTER, 1925.

Three applications were approved.

## APPLICATIONS FOR ELECTION AS SUBSCRIBERS UNDER SECTION VI OF THE SUPPLEMENTAL CHARTER, 1925.

Two applications were approved.

## RESIGNATIONS.

The following resignations were accepted :—

A. Paul MacAlister [F.].

G. Leslie Head [A.].

W. J. Leahy [A.].

R. A. Walter [A.].

## THE ELMES TESTIMONIAL FUND.

Mr. G. Hastwell Grayson [F.] was reappointed a trustee.

## HON. AUDITORS.

The Council nominated Mr. A. H. Goslett [F.] and Mr. F. J. Toop [A.] as Hon. Auditors for the Session 1926-1927.

## ATTENDANCES AT COUNCIL AND STANDING COMMITTEE MEETINGS, 1925-26.

## COUNCIL (8 Meetings).

*President* : E. Guy Dawber, 8. *Vice-Presidents* : Major Harry Barnes, 6 ; Sir Banister Fletcher, 8 ; Arthur Keen, 6 ; Thomas R. Milburn, 7. *Past Presidents* : Sir Reginald Blomfield, 0 ; J. Alfred Gotch, 1. *Hon. Secretary* : E. Stanley Hall, 8.

*Members of Council* : Professor S. D. Adshead, 3 ; Henry V. Ashley, 6 ; Herbert T. Buckland, 5 ; Sir John J. Burnet, 2 ; Walter Cave, 6 ; Major H. C. Corlette, 7 ; Henry M. Fletcher, 8 ; Francis Jones, 5 ; H. V. Lanchester, 6 ; Sir Edwin L. Lutyens, 0 ; E. C. P. Monson, 5 ; T. Taliesin Rees, 7 ; Professor C. H. Reilly, 6 ; Edwin J. Sadgrove, 2 ; H. D. Searles-Wood, 6 ; Sir A. Brumwell Thomas, 6 ; Percy E. Thomas, 6 ; Francis T. Verity, 0.

*Associate Members of Council* : H. Chalton Bradshaw, 8 ; Leonard H. Bucknell, 7 ; Professor Lionel B. Budden, 4 ; Lieut.-Colonel H. P. Cart de Lafontaine, 7 ; G. Leonard Elkington, 6 ; Major T. C. Howitt, 5 ; P. W. Hubbard, 7 ; Manning D. Robertson, 5 ; Michael Waterhouse, 8.

*Licentiate Members of Council* : Lieut.-Colonel P. A. Hopkins, 6 ; J. Inch Morrison, 2 ; Captain A. Seymour Reeves, 8 ; J. C. S. Soutar, 6 ; Lieut.-Colonel N. H. Waller, 5 ; John E. Yerbury, 8.

*Representatives of Allied Societies in the United Kingdom or the Irish Free State* : Arthur J. Hope (Manchester), 5 ; E. Bertram Kirby (Liverpool), 7 ; Eric Morley (Leeds), 3 ; H. L. Paterson (Sheffield) (deceased), 5 ; Lieut.-Colonel George Reavell (Northern), 7 ; A. T. Butler (Birmingham), 5 ; Ernest R. E. Sutton (Nottingham), 3 ; J. Stockdale Harrison (Leicester), 5 ; G. C. Lawrence (Wessex), 8 ; Harold S. Rogers (Berks, Bucks and Oxon), 8 ; John Keppie (Incorporation of Architects in Scotland), 3 ; George A. Paterson (Glasgow), 2 ; C. G. Soutar (Dundee), 2 ; Charles F. Ward (South Wales), 8 ; Professor R. M. Butler (Ireland), 3.

*Representative of Allied Societies in the British Dominions Overseas* : Percy E. Nobbs (Canada), 0.

*Representative of the Architectural Association (London)* : H. S. Goodhart-Rendel, 5.

*Representative of the Association of Architects, Surveyors and Technical Assistants* : Charles McLachlan, 6.

*Chairman of the Board of Architectural Education* : Maurice E. Webb, 8.

† *Chairmen of the Four Standing Committees* : Walter Tapper (Art), 6 ; A. H. Moberly (Literature), 6 ; J. Douglas Scott (Practice), 6 ; J. Ernest Franck (Science), 5.

† Marked thus were appointed after the second meeting of the Council ; possible attendances, 6.

## STANDING COMMITTEES.

*Art* (9 meetings).—*Fellows* : Professor S. D. Adshead, 3 ; Sir John J. Burnet, 2 ; E. Guy Dawber, 0 ; H. P. Burke Downing, 7 ; H. V. Lanchester, 1 ; F. Winton Newman, 8 ; Halsey Ricardo, 4 ; Walter Tapper, 8 ; Francis T. Verity, 3 ; Maurice E. Webb, 1. *Associates* : Leonard H. Bucknell, 8 ; R. A. Duncan, 5 ; Cyril A. Farey, 5 ; H. J. Rowse, 3 ; W. Harding Thompson, 7 ; Michael Waterhouse, 2. *Licentiates* : A. S. Soutar, 4 ; Francis R. Taylor, 8. \**Appointed by Council* : Heaton Comyn, 5 ; H. S. Goodhart-Rendel, 2 ; Fredk. R. Hiorns, 3 ; Hon. H. A. Pakington, 8 ; Louis de Soissons, 5.

*Literature* (9 meetings).—*Fellows* : Louis Ambler, 8 ; C. J. Dawson, 1 ; F. C. Eden, 4 ; Henry M. Fletcher, 3 ; D. Theodore Fyfe, 3 ; Oswald P. Milne, 2 ; A. H. Moberly, 9 ; Basil Oliver, 6 ; C. S. Spooner, 5 ; Arthur Stratton, 5. *Associates* : H. Chalton Bradshaw, 3 ; Professor Lionel B. Budden, 1 ; C. Cowles-Voysey, 4 ; A. Trystan Edwards, 1 ; H. C. Hughes, 6 ; C. E. Sayer, 9. *Licentiates* : Arthur E.

Henderson, 7; Lieut.-Colonel N. H. Waller, 1; John E. Yerbury, 7. \**Appointed by Council*: W. H. Ansell, 3; Miss I. M. Chambers, 3; Ronald P. Jones, 3; Sir A. Brumwell Thomas, 3; Grahame B. Tubbs, 7.

*Practice* (10 meetings).—*Fellows*: W. H. Atkin-Berry, 10; F. Chatterton, 9; Max Clarke, 9; G. Hastwell Grayson, 7; Francis Jones, 1; Arthur Keen, 5; G. H. Lovegrove, 8; D. Barclay Niven, 6; W. Gillbee Scott, 6; Herbert A. Welch, 5. *Associates*: G. Leonard Elkington, 7; H. V. Milnes Emerson, 6; W. H. Hamlyn, 9; P. W. Hubbard, 8; J. Douglas Scott, 10; Charles Woodward, 10. *Licentiate*: J. W. Denington, 7; Captain A. Seymour Reeves, 8; J. C. S. Soutar, 9. \**Appointed by Council*: Delissa Joseph, 7; Thomas R. Milburn, 1; E. C. P. Monson, 5; A. J. Taylor, 2; Harry Teather, 5.

*Science* (10 meetings).—*Fellows*: R. Stephen Ayling, 3; T. P. Bennett, 5; W. E. Vernon Crompton, 7; W. R. Davidge, 2; Francis Hooper, 9; Edwin J. Sadgrove, 2; H. D. Seales-Wood, 5; Professor R. Elsey Smith, 4; Digby L. Solomon, 7; Dr. Raymond Unwin, 4. *Associates*: R. J. Angel, 3; Hope Bagenal, 4; P. W. Barnett, 2; Edwin Gunn, 4; R. G. Lovell, 1; Harvey R. Sayer, 5. *Licentiate*: E. H. Evans, 5; G. N. Kent, 10; Percy J. Waldram, 9. \**Appointed by Council*: J. E. Dixon-Spain, 3; E. Fiander Etchells, 3; J. Ernest Franck, 9; Lieut.-Colonel P. A. Hopkins, 6; Major Charles F. Skipper, 7.

\* Marked thus were appointed after the first meetings of the Committees.

#### THE ANNUAL ELECTIONS. NEW NOMINATIONS TO COUNCIL AND STANDING COMMITTEES.

The following nominations have been made by members in accordance with Bye-Law 36 :—

*As Vice-President*.—Downing: Henry Philip Burke, F.S.A. [F.], nominated by Herbert Baker, J. J. Joass, And. N. Prentice, Detmar Blow, Heaton Comyn, Fredk. R. Hiorns, Alfred H. Hart, F. T. W. Goldsmith, *Fellows*.

*As Members of Council*.—Gill: Charles Lovett [F.], nominated by S. D. Adshead, Stanley C. Ramsey, A. E. Richardson, Herbert W. Wills, Arthur Stratton, H. V. Lanchester, *Fellows*; Max R. Hofer, *Associate*. Goodhart-Rendel: Harry Stuart [F.], nominated by E. Stanley Hall, J. Alan Slater, Harry Barnes, Herbert A. Welch, Herbert T. Buckland, Henry V. Ashley, *Fellows*; G. Leonard Elkington, *Associate*.

*As Associate-Members of Council*.—Batty: John [A.], nominated by Charles McLachlan, R. J. Tall, Irwin G. Smith, Leolin C. Gregory, William H. Hamlyn, *Associates*; J. E. Richardson, J. W. Denington, *Licentiate*. Heaven: Frank Henry, P.A.S.I. [A.], nominated by Harry Teather, Percy Thomas, *Fellows*; John Williamson, F. W. Burnett, R. H. Winder, T. Leonard Jones, J. Culy Harvey, Trevor S. Bowes, R. E. M. Coombes, Ivor P. Jones, *Associates*; W. T. Springall, J. Morlais Evans, Ralph Simmonds, John R. J. Hallett, Walter C. Cooper, *Licentiate*.

*As Licentiate Members of Council*.—Denington: Joseph William [L.], nominated by Charles McLachlan, R. J. Tall, Irwin G. Smith, Leolin C. Gregory, William H. Hamlyn, F. R. Jelley, *Associates*; J. E. Richardson, *Licentiate*. Waldram: Percy John, F.S.I. [L.], nominated by F. C. Moscrop-Young, W. H. Gunton, Charles F. Skipper, Max Clarke, Digby L. Solomon, *Fellows*; Herbert Lewis Curtis, E. N. Clifton, *Associates*.

*As Members of the Art Committee*.—Kenyon: Arthur William [F.], nominated by W. E. Watson, David Barclay Niven, Stanley G. Livock, Victor Wilkins, Edwin J. Sadgrove, J. E. Dixon-Spain, Charles Nicholas, *Fellows*; H. J. Venning, C. H. James, *Associates*; P. A. Hopkins, *Licentiate*.

*As Licentiate Members of the Art Committee*.—Short: Samuel George [L.], nominated by W. J. Wagborne, R. J. W. Newma, *Fellows*; R. H. Jones, *Associate*; J. Brankstone Muir, H. Anderson, G. P. Crane, John E. Yerbury, *Licentiate*.

*As Members of the Literature Committee*.—Briggs: Mary Shaw [F.], nominated by Howard Robertson, F. C. Edwards, Robert Atkinson, *Fellows*; J. Murray Easton, Cyril A. Fair, Hope Bagenal, L. H. Bucknell, J. Macgregor, C. St. J. Miller, *Associates*.

*As Members of the Practice Committee*.—Fraser: Percy Maurice [F.], nominated by W. Henry White, Max Clarke, E. C. P. Monson, *Fellows*; H. Haylock Golding, G. Leonard Elkington, J. Douglas Scott, *Associates*; Percy J. Waldram, *Licentiate*.

*As Associate Members of the Practice Committee*.—Woodward: Charles [A.], nominated by Thomas R. Milburn, Francis Jones, Percy Thomas, Maurice E. Webb, *Fellows*; J. Douglas Scott, G. Leonard Elkington, *Associates*; A. Seymour Reeves, *Licentiate*.

*As Members of the Science Committee*.—Pugh-Jones: David F.S.I. [F.], nominated by Percy Thomas, Harry Teather, William H. Scott, *Fellows*; Ivor P. Jones, John Williamson, F. W. Burnett, John A. Metcalfe, *Associates*; Sidney Williams, *Licentiate*.

*As Associate Members of the Science Committee*.—Mayhew: Alfred Ernest [A.], nominated by Howard Robertson, F. C. S. White, L. H. Bucknell, J. H. Sturgeon, J. Murray Easton, Eric L. Bird, F. E. Green, *Associates*.

## Notices

### THE FOURTEENTH GENERAL MEETING.

The Fourteenth General Meeting (Business) of the Session 1925-26 will be held on Monday, 14 June 1926, at 8 p.m., for the following purposes :—

To read the Minutes of the Annual General Meeting held on 3 May 1926; formally to admit members attending for the first time since their election or transfer.

To proceed with the election of the candidates for membership whose names were published in the JOURNAL for 24 April 1926 (page 397) and in this number (page 425).

To read the reports of the Scrutineers appointed to examine the voting papers for the election of the Council and Standing Committees.

### THE FIFTEENTH GENERAL MEETING.

The Fifteenth General Meeting (Ordinary) of the Session 1925-26 will be held on Monday, 21 June 1926, at 8 p.m., for the following purposes :—

To read the Minutes of the Fourteenth General Meeting (Business) held on 14 June 1926; formally to admit members attending for the first time since their election or transfer.

To read the following paper: "The Work of the late Sir Thomas Graham Jackson, R.A.," by Mr. H. S. Goodhart-Rendel [F.].

### MASONIC MEMORIAL COMPETITION.

An Exhibition of the drawings submitted for the Masonic Memorial Competition will be held in the R.I.B.A. Galleries. It will be open to the public on Monday, 31 May, and will remain open till Wednesday, 9 June, from 10 a.m. to 6.30 p.m. (Saturday, 4.30 p.m.).



BRITISH ARCHITECTS' CONFERENCE,  
1926.

*In consequence of the General Strike the Conference has been postponed until further notice.*

All previous announcements on the subject are to be regarded as cancelled.

The following events of the R.I.B.A. Season have had to be postponed until further notice owing to the General Strike :

The British Architects' Conference : 14 June to 19 June.  
R.I.B.A. Banquet at the Guildhall : 17 June.

The Presentation of the Royal Gold Medal for Architecture to Professor Ragnar Östberg : 17 June.

## THE ROYAL GOLD MEDAL.

The presentation of the Royal Gold Medal for Architecture to Professor Ragnar Östberg, which was postponed owing to the General Strike, will take place at the Annual Dinner in November.

## R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28 Bedford Square, London, W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the Committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.

## ADVERTISEMENTS IN THE R.I.B.A. JOURNAL.

The attention of members of the R.I.B.A. is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. An increase in the income derived from such advertisements is a help to the financial position of the R.I.B.A. and an advantage to all its members. The circulation of the JOURNAL is world-wide, and going, as it does, to more than 6,000 architects in almost every part of the Empire, its potential value as an advertising medium is unequalled.

## BUSINESS MEETING, 14 JUNE 1926.

An election of members will take place at the Business General Meeting on 14 June. The names and addresses of the candidates (with the names of their proposers) found by the Council to be eligible and qualified for membership according to the Charter and Bye-laws, and recommended by them for election, are as follows :—

## AS FELLOWS (39).

ANDREW : HARRY [A. 1915], Custom House Buildings, Whitefriargate, Hull; 9 Whitefriargate, Hull. Proposed by G. Dudley Harbron, Henry V. Ashley, Joseph H. Hirst.

BARKER : PHILIP EDWARD [A. 1888], 32 King Street West, Manchester; "Glenbrook," Ongden Road, Didsbury, Manchester. Proposed by Paul Ogden, Percy S. Worthington, Francis Jones.

BATES : ERNEST [A. 1904], 27 Queen Victoria Street, E.C.4; Winton Croft, Purley Downs, Surrey. Proposed by H. Percy Gordon, Fredk. R. Hiorns, Jos. Gunton.

BESWICK : ALFRED EDWARD [A. 1909], 10 Victoria Road, Swindon; 32 Westlecot Road, Swindon. Proposed by the Council.

CASTELLO : MANUEL NUNES [A. 1904], 133 Moorgate, E.C.2; 26 Warwick Mansions, Cromwell Crescent, S.W.5. Proposed by Lewis Solomon, Herbert A. Welch, Alfred Cox.

DURAND : ARTHUR HENRY [A. 1921], 22 Orchard Street, Portman Square, W.1. Proposed by Geo. H. Fellowes Prynne, W. E. Riley, Charles H. Gage.

GEE : ERNEST [A. 1916], 24 North John Street, Liverpool; 32 Moor Lane, Great Crosby, Liverpool. Proposed by Edgar Quiggin, E. Bertram Kirby, Arnold Thornely.

GUTTERIDGE : LT.-COL. REGINALD FOWLER, T.D. [A. 1909], 9 Portland Street, Southampton; 31 University Road, Southampton. Proposed by John H. Blizard, J. Arthur Smith, Harry Hutt.

HARRILD : FRED, M.A. Oxon. [A. 1922], 57A High Street, Totnes, S. Devon. Proposed by Sir Henry Tanner, Henry Tanner, E. J. Tanner.

HOLDEN : WALTER FREDERICK CLARKE, M.C. [A. 1922], 15 Bishopsgate, E.C.2; Salter's Acre, Gregories Road, Beaconsfield. Proposed by F. C. R. Palmer, A. Burnett Brown, Julian G. Burgess.

KENNEDY : EDWIN RIDDELL [A. 1906], 11 Wellington Place, Belfast; The Bungalow, Sandown Road, Knock, Co. Down, Ulster. Proposed by N. Fitzsimons, T. W. Henry, F. H. Tulloch.

MINTY : JAMES ANDREW [A. 1901], 35 Craven Street, Charing Cross, W.C.2; Beeleigh, Snaresbrook, Essex. Proposed by E. Guy Dawber, D. Barclay Niven, Professor R. Elsey Smith.

WALKER : FREDERICK ARTHUR [A. 1921], Architect in China to Messrs. The Asiatic Petroleum Co. (N.C.), Ltd., No. 1 The Bund, Shanghai, China. Proposed by E. Forbes Bothwell, R. E. Stewardson, T. M. Wilson.

WEARING : STANLEY JOHN [A. 1907], 3 Redwell Street, Norwich; 4 Eaton Road, Norwich. Proposed by Edw. T. Boardman, J. Stockdale Harrison, George Nott.

WOODS : FRANK [A. 1910], 3 High Street, Maidenhead; "Fir Croft," Kimbers Lane, Maidenhead. Proposed by Clifton R. Davy, Harry Hutt, Geo. E. Nield.

And the following Licentiate, who are qualified under Section IV, Clause C (ii), of the Supplemental Charter of 1925 :—

BALL : CHARLES WILLIAM, F.S.I., Whittington Chambers, King's Road, Southsea; 3 St. Ursula Grove, Southsea. Proposed by J. W. Walmisley, A. E. Cogswell, Victor Wilkins.

BERRY : JOSEPH, J.P., 3 Market Place, Huddersfield; Hatherley, New North Road, Huddersfield. Proposed by Norman Culley and the Council.

BOTTOMLEY : JOHN MITCHELL, Summerland, Ramsey, Isle of Man. Proposed by Thomas Butler Wilson, H. S. Chorley, Geo. Bland.

FISHER : FRANK JAMES, 38 Bloomsbury Square, W.C.1; "Elmsthorpe," 37 Barrington Road, S.W.9. Proposed by H. D. Searles-Wood, Charles J. Smithem, Robert G. Muir.

HAVERS : ALBERT CHARLES, 66 London Street, Norwich; 43 Surrey Street, Norwich. Proposed by Edw. T. Boardman, George H. Widdows, Edwin J. Tench.

KEMPSTER : FRED, 54 Bedford Square, W.C.1; Chalgrove, Ingatstone Road, Wanstead Park, E.12. Proposed by E. Stanley Hall, Maurice E. Webb, J. Ernest Franck.

LONG : ALFRED, J.P., 21 New Street, West Bromwich. Proposed by Hafry Cherrington, W. Alexander Harvey, S. J. Stainton.

SHENTON : FREDERICK WILLIAM, 27 Fitzroy Street, W.1; Elwy Cottage, Whetstone, N.20. Proposed by the Council.

And the following Licentiate who have passed the qualifying Examination :—

BELSHER : BERNARD JAMES, M.Inst.C.E., Stepney Council Offices, Raine Street, Wapping, E.1; 5 Hildrop Road, Camden Road, N.7. Proposed by Henry N. Kerr, John A. Cheston, Arthur Crow.

BOND: JOHN OWEN, 29 Castle Meadow, Norwich; Corner Cottage, Eaton Hill, Norwich. Proposed by Edw. T. Boardman, L. Maggs, R. J. Williams.

CLARE: GEORGE EDWARD, 33 College Road, Harrow; The Rosary, Flambard Road, Harrow, Mddx. Proposed by John H. Markham, George J. Skipper, S. Pointon Taylor.

DAVIDSON: WILLIAM, 4 Melville Street, Edinburgh; East House, Liberton, Midlothian. Proposed by James A. Arnott, John Begg, Thomas P. Marwick.

EASTON: COL. ARTHUR, T.D., 1 Manor Street, Hull; "Foss Dyke," Hornsea, E. Yorks. Proposed by W. S. Walker, Joseph H. Hirst, T. Beecroft Atkinson.

FORGE: FREDERICK LINDUS, 3 Crooked Lane, King William Street, E.C.; "Briarside," Weybridge, Surrey. Proposed by Gilbert H. Lovegrove, Sir Banister Fletcher, H. Edmund Mathews.

HAYNES: FREDERICK STANLEY, 90 Hanover Road, Brondesbury Park, N.W.10. Proposed by B. Parkin Haigh, F. Edward Jones, Edward Warren.

HILL: THOMAS JACKSON, 52 Union Street, Oldham; 7 Langdale Avenue, Coppice, Oldham. Proposed by Ernest Simister, John B. Gass, Arthur J. Hope.

JOHNSTON: JOSEPH MARR, 47 Charlotte Street, Leith; 5 Derby Street, Leith. Proposed by John James Joass, T. F. MacLennan, A. Lorne Campbell.

LAMB: PERCY AIDAN, 13 John Street, Adelphi, W.C.; "The Mount," 10 Liverpool Road, Kingston Hill. Proposed by Stanley J. May, Sir Edwin Cooper, F. T. W. Goldsmith.

LUMB: FRANCIS LEONARD, 19 Clifton Street, Blackpool, and Estate Office, Fleetwood; "Whincote," Cleveleys Avenue, Cleveleys Park, Blackpool. Proposed by William B. Walton, Halstead Best, R. H. Cunliffe.

MUNDEN: PATRICK JOHN FITZGERALD, 28 South Frederick Street, Dublin; Ivydene, Merrion Road, Pembroke, Co. Dublin. Proposed by J. C. Dewhurst, Henry J. Lyons, Robert Atkinson.

SANDERS: INGALTON, Midland Bank Chambers, 165 High Street, Southampton; Mount Beulah, 122 Romsey Road, Southampton. Proposed by John H. Blizard, J. Arthur Smith, Ernest Bird.

SOUTAR: JOHN CARRICK STUART, "Wylde," North End, Hampstead, N.W.3, and 8 King William Street, Strand, W.C.2; "Fairport," Turner Drive, Hampstead Garden Suburb, N.W.11. Proposed by Dr. Raymond Unwin, Ralph Knott, E. Stone Collins.

TAYLOR: SAMUEL, 74-78 Manchester Road, Burnley; 220 Manchester Road, Burnley. Proposed by Walter Stirrup, Arthur J. Hope, John Swarbrick.

WEEKES: JOSEPH, County Architect, 88 College Street, Dumbarton; 227 Corkerhill Road, Glasgow. Proposed by Geo. D. Macniven, Chas. G. Soutar, James Lochhead.

#### AS ASSOCIATES (16).

ALABASTER: JOHN RICHARD [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 22 Arica Road, Brockley, S.E.4. Proposed by Professor A. E. Richardson, C. Lovett Gill, Arthur Stratton.

ALLEN: ALFRED MAXWELL [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Nortons, Lingfield, Surrey. Proposed by W. Braxton Sinclair, Howard Robertson, E. Stanley Hall.

BRADDOCK: HENRY [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 45 Dennis Park Crescent, Wimbledon, S.W.20. Proposed by Howard Robertson, P. Morley Horder, Robert Atkinson.

HOLLINSHED: CHARLES NEVILLE [Special], c/o Commissioner for Australia, 44 Whitehall Street, New York, U.S.A. Proposed by James S. Gibson, W. S. A. Gordon, W. B. Simpson.

LLEWELLYN-MORGAN: GUY [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 11 King's Bench Walk, Inner Temple, E.C.4. Proposed by Professor A. E. Richardson, C. Lovett Gill, Arthur Stratton.

LORD: WILFRID TURNER, B.A. Cantab. [Final], 18 Park Hill, Ealing, W.5. Proposed by C. E. Varndell, Howard Robertson, Robert Atkinson.

MCCONNEL: KENNETH HAMLYN, B.Arch. Sydney [Passed five years' course at Sydney University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], c/o Queensland National Bank, 8 Princes Street, E.C. Proposed by Professor Leslie Wilkinson, Major Hubert C. Corlette, Maurice E. Webb.

MARTIN: GEORGE LEGAT, Junr. [Final], 31 Maureen Terrace, Seaham Harbour. Proposed by Thomas R. Milburn, R. Burns Dick, W. Milburn.

MARTIN-SMITH: DONALD FRANK [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], The Briars, Arkley, Barnet. Proposed by Howard Robertson, Robert Atkinson, Oswald P. Milne.

MORRIS: ALEXANDER GEORGE [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], "Thornbury," Westlecott Road, Swindon. Proposed by Granville E. S. Streatfeild, Howard Robertson, E. Stanley Hall.

MOSLEY: EDNA [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 10 Cavenish Road, St. John's Wood, N.W. Proposed by Howard Robertson, Robert Atkinson, Oswald P. Milne.

PRESTON: FREDERICK LESLIE [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 190 Clive Road, Dulwich, S.E. Proposed by F. Danby Smith, Edwin P. Cameron, Arthur H. Church.

RITCHIE: THOMAS [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 59 Gloucester Crescent, Regent's Park, N.W.1. Proposed by Howard Robertson, Robert Atkinson, T. P. Bennett.

ROSCOE: FRANK, Junr. [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Brownlea, Berkhamsted, Herts. Proposed by C. H. E. Quennell, Robert Atkinson, Howard Robertson.

STEWART: ALEXANDER MALCOLM [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 93 Kenneth Street, Inverness. Proposed by Robt. G. Wilson, Junr., John W. Walker, George Watt.

WOOD: JOHN WILLIAM [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 18 Belsize Road, South Hampstead, N.W.6. Proposed by Howard Robertson, Robert Atkinson, E. Stanley Hall.

#### AS HON. ASSOCIATES (2).

BELL: ROBERT ANNING, R.A., R.W.S., R.B.C., Hon. LL.D., 28 Holland Park Road, W.14. Proposed by the Council.

MACKAIL: JOHN WILLIAM, M.A., LL.D., F.B.A., Professor of Ancient Literature in the Royal Academy, 6 Pembroke Gardens, W.8. Proposed by the Council.

#### AS HON. CORRESPONDING MEMBER (1).

DEFRASSE: ALPHONSE, Inspecteur Général des Bâtiments Civils et des Palais Nationales, Architecte en Chef de la Banque de France, 31 Rue de Tournon, Paris (6<sup>e</sup>), France. Proposed by the Council.



## Competitions

### ROMSGROVE RURAL DISTRICT HOUSING COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

### DONCASTER INFECTIOUS DISEASES HOSPITAL COMPETITION.

Owing to the strike it was found necessary to postpone the date by which plans for this competition should be sent in, and Saturday, the 29th instant, has now been fixed.

### EACH IMPROVEMENT SCHEME, ABERDEEN.

The Town Council of Aberdeen invite architects to submit competitive designs for the proposed buildings to be erected at the sea beach, Aberdeen. Assessor, Mr. John Keppie [F.], President of the Incorporation of Architects in Scotland. Designs to be sent in not later than 28 June 1926. Conditions may be obtained from Mr. B. Gardner, Director of Housing, Town House, Aberdeen.

### OWNHAM MARKET U.D.C. HOUSING SCHEME COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

### MASONIC PEACE MEMORIAL.

The assessors (Sir Edwin Lutyens, R.A., F.R.I.B.A., Mr. Walter Cave, F.R.I.B.A., and Mr. A. Burnett Brown, R.I.B.A.) in the competition for the new Masonic Buildings in Great Queen Street to be erected as a Masonic Peace Memorial have awarded first place to the designs submitted by Messrs. H. V. Ashley and Winton Newman, F.R.I.B.A., of 14 Gray's Inn Square.

### COUNCIL OFFICES AND FIRE STATION: PURLEY.

The President of the Royal Institute of British Architects has nominated Mr. P. D. Hepworth, F.R.I.B.A., as assessor in this competition.

### SCHEME FOR BUILDING LARGE RESIDENCES: CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competition.

### MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, R.I.B.A., to act as a Jury of Assessors in connection with this competition.

### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

### LEAGUE OF NATIONS.

#### COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1., by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

### AUSTRALIAN NATIONAL WAR MEMORIAL AT VILLERS BRETONNEUX

The date for the submission of designs in the above competition has been further extended from 31 May to 31 July 1926.

### SCOTTISH LEGAL LIFE ASSURANCE SOCIETY: NEW AND ENLARGED PREMISES.

The President of the Royal Institute of British Architects has nominated Mr. John Keppie, A.R.S.A., F.R.I.B.A., as Assessor in this competition.

## Members' Column

### PARTNERSHIPS WANTED.

A.R.I.B.A., aged 36 years, desires partnership, or position with a view to partnership, in London or South of England. Small capital available. Is energetic and unafraid of work. Can commence immediately.—Apply Box 1646, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

A.R.I.B.A. (31) desires assistantship with view to partnership, in Midlands or near. Capital available.—Reply Box 2346, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

ARCHITECT (A.R.I.B.A.), 25 years' London general practitioner, desires partnership with a view to extend connection. Works executed include public buildings, business premises, housing schemes, etc., etc. Wide practical and technical experience. Substantial capital available to secure interest in business requiring energy and enterprise.—Reply Box 5121, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

F.R.I.B.A. desires partnership or position with a view to partnership with a well established firm of architects. Young and energetic, with good all-round London experience with well-known architects. Reply Box 3561, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

#### PARTNERSHIP OR WORKING ARRANGEMENT.

A.R.I.B.A., at present and since 1919 in senior capacity with leading London firm, desires working basis with prospect of future advancement. Private connection and work available. Also considerable experience of big work.—Reply Box 3430, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

#### APPOINTMENTS WANTED.

ASSOCIATE with small practice not yet sufficiently remunerative, offers assistance to other architect. Own offices, 'phone, etc. Very reasonable terms. Midlands.—Reply Box 1426, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

A.R.I.B.A. is prepared to assist in the preparation of plans, working drawings, details and specifications at own office (W.C.2).—Reply Box 4840, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

A.R.I.B.A. desires position or partnership preferably abroad. Has had experience of English County education and Colonial Government work, and has managed for the last three years a general practice abroad. Competitions, working drawings, quantities and supervision, used to construction in reinforced concrete. Photographs of work can be seen on application at the R.I.B.A.—Reply Box 2232, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

#### APPOINTMENT VACANT.

ARCHITECT (F.R.I.B.A.), Regent's Park district, requires lady secretary; shorthand, typewriting and general office routine; interest in architecture a recommendation. Whole or part time by arrangement. State full particulars and salary.—Apply Box 9424, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

#### OFFICES TO LET.

LONDON Architect (F.R.I.B.A.) has suite of offices to let—three good well-lighted rooms in quiet, old-fashioned building. West Central district. Rent £120 per annum. Telephone. Might be let furnished.—Apply Box 1762, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

#### OFFICE VACANT.

At 214 Bishopsgate, E.C.2, about 340 sup. ft., well-lit, with drawing office benches and drawers. Also with private room partitioned off. Electric light and 'phone. Rent £60 per annum, and fittings can be purchased.—Apply John Dewar, Esq., 45 Albemarle Street, W.1.

#### ROOM TO LET.

F.R.I.B.A. has large room to let in Raymond Buildings, £85 per annum, including cleaning and lighting, share of telephone and assistant can be arranged.—Apply Box 2236, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

#### CHANGE OF ADDRESS.

MR. PHILIP H. PILDITCH (A.) has changed his address from 678 Old Bond Street, where he was for some years a partner in the firm of Pilditch, Chadwick & Co., to 18 and 19 Craven Street, Strand, W.C.2, where he is starting in independent practice.

MR. R. P. BUSH, L.R.I.B.A., Quantity Surveyor, P.W. Dept., Accra, Gold Coast Colony, will be glad to receive duplicate copies of catalogues from manufacturers who are desirous of developing overseas business.

#### BOOKS FOR SALE.

THE FOLLOWING BOOKS ARE FOR DISPOSAL:

David Roberts' *Egypt & Nubia*, 3 vols., folio, 1846.

David Roberts' *Holy Land*, 3 vols., folio, 1842.

Digby Wyatt's *Industrial Arts of the Nineteenth Century*, 2 vols., folio, 1853.

*Architecture by Andrea Palladio*, 1738. Books II, III, IV.

*A.A. Sketch Book*, 1881-1893, in 6 vols.

9 vols. selected plates from *The Architect and Building News*, 1881-1896.

Reply Box 2992, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## Minutes XIII

SESSION 1925-1926.

At the Ninety-second Annual General Meeting (being the Thirteenth General Meeting of the Session 1925-1926), held on Monday, 3 May 1926, at 8 p.m., Mr. Arthur Keen, Vice-President, in the Chair. The attendance book was signed by 20 Fellows (including 12 members of the Council), 10 Associates (including 2 members of the Council) and 5 Licentiates (including 1 member of the Council).

The Minutes of the Ordinary General Meeting held on 19 April, having been published in the JOURNAL, were taken and read, confirmed, and signed by the Chairman.

The Hon. Secretary announced the decease of the following members:—

Leo John Williams, elected Associate 1921;

Evan Ivor Evans, elected Licentiate 1925;

Tom Johnson, elected Licentiate 1925;

William Thomas Topott, elected Licentiate 1912;

Joseph Pennell, elected Hon. Associate 1917;

Alfred Culshaw, elected Associate 1879, Fellow 1888, transferred to Class of Retired Fellows 1916;

William Watkins, elected Fellow 1881, transferred to Class of Retired Fellows 1918;

and on the motion of the Hon. Secretary it was Resolved that the regrets of the Institute for the loss of these members be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

The Chairman formally presented the Report of the Council and the Standing Committees for the official year 1925-26, and stated that the Chairmen or other representatives of all the Committees whose reports were appended to the Council report had been asked to attend the meeting so as to be in position to answer any questions that might be asked in connection with their reports.

The Chairman having moved the adoption of the Report and invited discussion upon it, the Hon. Secretary seconded the motion, and a discussion ensued.

The motion having been put from the Chair, it was unanimously Resolved—

That the Report of the Council and Standing Committees for the official year 1925-1926 be approved and adopted.

The Chairman stated that the list of attendances at the Council and the Standing Committee meetings had been laid on the table and would be printed in the next issue of the JOURNAL.

Upon the motion of the Chairman, seconded by the Hon. Secretary, a vote of thanks was passed by acclamation to Mr. A. Harold Goslett [F.] and Mr. F. J. Toop [A.] for their services as Hon. Auditors for the past year.

Mr. A. H. Goslett [F.] and Mr. F. J. Toop [A.] were nominated as Hon. Auditors for the ensuing year of office.

The proceedings closed at 9.15 p.m.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to the method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

#### R.I.B.A. JOURNAL.

Dates of Publication.—1926: 8th, 22nd May; 12th, 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

THIRD SERIES

VOL. XXXIII. No. 15

12 JUNE 1926

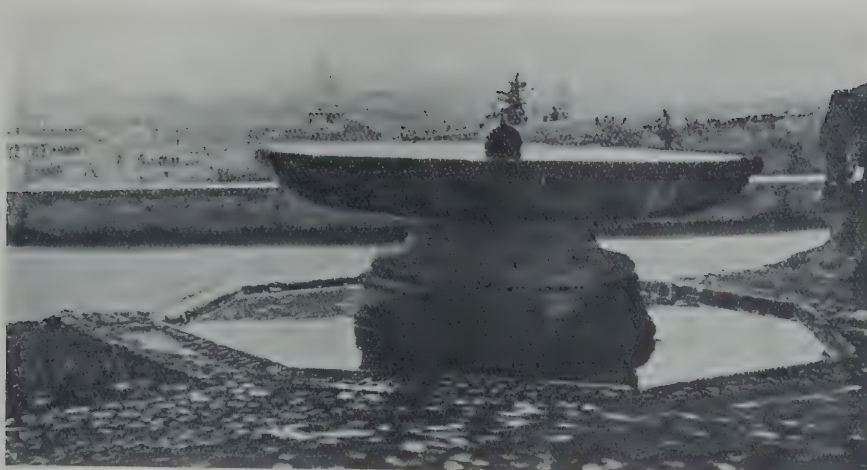
## Contents for 12 June 1926

	Page
GARDENS. By F. Inigo Thomas. Illustrated .. .. .	431
THE STONE DECAY AND PRESERVATION OF ANCIENT BUILDINGS, No. 1. By Professor A. P. Laurie .. .. .	440
WATERLOO BRIDGE: LETTERS TO THE PRIME MINISTER .. .. .	446
REVIEWS:	
BODIAM CASTLE. By Nathaniel Lloyd .. .. .	442
THE PRESERVATION OF RURAL ENGLAND. By Professor S. D. Adshead .. .. .	444
MODERN PLASTERWORK CONSTRUCTION. By Arthur Bartlett .. .. .	445
MODERN BUILDING PRACTICE. By Martin S. Briggs. .. .. .	449
THE WEST END OF YESTERDAY AND TO-DAY. By C. J. Tait .. .. .	449
SKETCHING IN LEAD PENCIL FOR ARCHITECTS AND OTHERS. By F. R. Hiorns .. .. .	450
NEW CHAPTERS IN GREEK ART. By H. C. Hughes .. .. .	451
ITALIAN GARDENS OF THE RENAISSANCE. By I. M. C. .. .. .	451
THE ARCHITECTURE CLUB .. .. .	448
THE LIBRARY: NOTES ON RECENT ACQUISITIONS .. .. .	451
PRESENTATION OF DRAWINGS OF BODIAM CASTLE .. .. .	452
THE SHAKESPEARE MEMORIAL THEATRE .. .. .	452
DISCUSSION ON THE R.I.B.A. ANNUAL REPORT .. .. .	453
REGULATIONS FOR STEEL-FRAMED BUILDINGS .. .. .	458
LAW OR PROPERTY ACT, 1925. By J. Douglas Scott .. .. .	459
LEGAL: BANKS v. VAILE BROS. .. .. .	460
ARCHITECTS' BENEVOLENT SOCIETY: ANNUAL REPORT .. .. .	460
THE INTERNATIONAL BUILDING TRADES EXHIBITION .. .. .	461
SURVEYORS' INSTITUTION: ELECTION OF NEW PRESIDENT .. .. .	461
ST. DUNSTAN'S HOSPITAL .. .. .	461
OBITUARY:	
WILLIAM WATKINS .. .. .	462
JOHN CASH .. .. .	462
ALEXANDER MCWILLIAM .. .. .	462
REGISTRATION AS PROBATIONER R.I.B.A. .. .. .	462
NOTICES .. .. .	462
COMPETITIONS .. .. .	463
MEMBERS' COLUMN .. .. .	464



A FORECAST SKETCH IN OIL OF PROPOSALS FOR WATER, PLANTING AND ARCHITECTURE AT DRAKELOWE [UNEXECUTED]  
By F. Inigo Thomas





FOUNTAIN ON THE PINCIO, ROME

## Gardens

BY F. INIGO THOMAS.

[*A Paper read at the Royal Institute of British Architects on Wednesday, 14 April 1926.*]

AT the Institute I fear you are accustomed to listen to lectures of a very academic nature, and that is a character which I should find it difficult to import into any address of mine, so should it prove to be slight in the matter of history, and rather discursive, I must crave your indulgence. I find, too, that since I last read a paper on the lay-out of grounds some twenty-five years ago, many of the slides have been lost or mislaid, and we shall have to make the most of those that have survived.

Now, the subject on which I have been asked to speak to you is "Gardens," but I must hasten to explain that I accepted the title with a slight feeling of protest, as it seems to me to imply something rather apart from architecture, a point of view which is to blame for much that is dull in the surroundings of nineteenth century country houses.

I cannot picture to myself a garden, in its true sense, divorced from the building to which it belongs. There is something lacking in the County Council garden in a London park. One ought, of course, to be thankful that it may afford pleasure to so many folk, but somehow that is not very satisfying. The fact is, we all have a stronger individual than civic sense, and we are conscious

that what is public property is often the property of none. Gardens, in their right place round the house of the owner, spring into life and being; they grow to bear the impress of loving care and form the background of many fond memories.

They should, of course, be proportioned to the size of the house, which will probably connote the length of purse and the leisure of the owner. There is just as much sense of fitness in the cottager's plot as there is in the broader schemes of the country magnate.

So, to my thinking, a home should be an architectural conception of which the gardens really form a part. The several enclosures are the open air apartments in the making, and they should be studied from several points of view.

Sun, shelter and shade, both for human and vegetable occupants, should be the first consideration; then the prospect from each individual window; and, lastly, the views of the house from the gardens and effects to be obtained in the grounds themselves. All purely æsthetic considerations should be put to the simple test of picture composition, and if the massing of the ultimate effect is not felt likely to be good, steps should be taken to correct it.

The means at hand for obtaining results are

manifold. There is good spacing, change of level, and enclosure either by living things or masonry. There is massing of trees for big shadows and broad expanse of turf for sunlight, and there are flowers in beds, borders and walls for colour. Let the guiding principle be to create, with a reasonable element of time, such foregrounds, middle distances and backgrounds as would delight a painter. If you do this I think you will have succeeded.

I say "succeeded," but perhaps one should rather say that to prescribe them is all the architect is able to do. For to design the garden is one thing, and to garden it so as to obtain the desired effect is another. The latter naturally falls to the occupants to do throughout the seasons and does not come to fruition till long after the designer is gone and forgotten. Without the guiding mind the element of time may be useless or worse, but all we designers can do is to throw our bread upon the waters.

Architects should, of course, be fairly competent painters and something of sculptors. I have no doubt that in the present day they are all of them both. I seem to recall a time when members of this Institute and even Academicians acquired merit in borrowed Walcot plumes at Burlington House, but doubtless such things are of the past, and all of you now being masters of the brush will agree with my view that the outdoor portion of an architectural scheme is primarily a painter's problem.

If that is conceded, the artist should surely be left to select the materials for his picture, and among painters the biggest men have generally been content with very few pigments: Now, the pigments of the garden designer are trees and shrubs, flowers and creepers, and of all of these the nurseryman's catalogue contains a terrible variety. I doubt whether for the painter the colourman's list has half such terrors. But then, no sitter insists on setting the painter's palette—a situation from which the garden designer does not so easily escape!

Since these remarks of mine are mainly addressed to the students among you rather than to those of mature experience, it may not be out of place here to refer to the practical methods of carrying such works into execution. I can, of course, speak only of my own experience, and that of necessity ceased with the outbreak of war.

After seeing the place the first thing I did was to make a series of sketch forecasts in oil of the ultimate effect. The impatient client invariably broke in on these before they were finished, and one of two things occurred. If his enthusiasm was great and his bank balance small he would hurry me on to the next stage. If, on the other hand, he was wealthy he would probably decide at once that the suggestions went well beyond his means and it was useless to proceed. Hence these forecasts of mine never got carried very far.

The next stage was a careful survey and then a drawing to small scale of the whole scheme. This was made solely for discussion, and I insisted on being allowed to finish it as I thought it ought to be. It was mounted on a stretcher and framed for hanging in the house as a guide for the next generation in carrying on the scheme which perhaps the present would leave uncompleted. In the past such schemes were seldom finished under one owner. In course of discussion this might be, and generally was, departed from in many respects.

From that stage onwards I think the drawings were much the same as for ordinary building, but I have gone into this point rather more fully in a little book, *Keystones of Building*, which you have in the Library.

This outside work was generally done with approximate estimates based on a schedule and measured as the work proceeded, a system that proved more elastic than contract.

Having very briefly sketched how I think we ought to set about garden-making, it may be well to glance back into the past to see how our forbears dealt with them. In the middle ages necessities of defence argued small enclosures, but as times became more settled gardens enlarged their borders, and I have no doubt that an airman's view of England, say in the time of Elizabeth, would have shown a pretty pattern of places small and great scattered over the land.

I have never come across an early survey showing more than enclosures of English gardens, but Dutch engravers were painstaking folk, and here is a map of part of Holland in which the design of the gardens is given in some detail.

For England we have the bird's-eye views of Kyp and Knyffe in the time of William and Mary, but these are not quite surveys. A good example is the view of Hampton Court before the Bushey



Park approach, which was never completed, was planned by Sir Christopher Wren.

Another from the Netherlands shows how markedly the foreign schemes were laid out on a dominating centre line, a system that was rather less rigidly followed in England, at any rate in the earlier instances.

A typical example of an English lay-out is to be found in Drayton, near Kettering.

The various courts, of no great size, are nestled round the building on three fronts, and there is no attempt to make the scheme symmetrical on either side of the main centre or backbone, as was done in the Dutch engraving we saw just now.

In the second half of the seventeenth century over Europe generally the size of lay-out schemes increased apace. Not only was this noticeable in the gardens themselves, but especially in the groves and approaches. In England we were comparatively modest, but the complete lay-out of Badminton measured nine miles across, and this was one of many. The acreage of the Versailles gardens must be enormous, and I am told that at the seat of the Bariatinski family in the Crimea there are 15 miles to cover from the house to the lodge gates!

It is hardly surprising that owners found themselves unable to keep up places of such magnificence, and in their decaying splendour they easily aroused the ridicule of the rather cheap wits of the day.

By the middle of the eighteenth century the tide had turned against all schemes of stately form. The catchwords of the day were "Nature" and "Landscape," and the chief professor of the new cult was "Capability" Brown. He was followed by Humphry Repton and Sir Uvedale Price. In Repton's book he always seems to me to be in trouble with laboured explanations because he never quite knew what he meant himself. I fancy this was characteristic of the whole group, but they were allowed large sums to spend and they certainly altered the face of the country in the vicinity of many large houses.

Probably the chief recommendation of their method was that when done it could all be left to nature and the bill for upkeep avoided.

If the mantle of these men may be said to have fallen on anyone, it was on the shoulders of a genial uncle of my own who in the forties of last century gave up fox-hunting for laying out the

places of country gentlefolk in the prevailing "landscape" manner. Forty years later, while he was still at work, I came down from Oxford to learn architecture with the late Mr. Bodley, living the while with the aforesaid uncle.

Architectural study soon made plain what was wrong with our buildings. The landscape method was denying them their proper surroundings. I found this view was strongly shared by Mr. Reginald Blomfield, as he then was, and we set to work on "The Formal Garden in England" in the hope of effecting reform. At that time only scattered knowledge existed of surviving remains of the older method, so a good deal of travelling about the country was entailed in finding them.

By 1892 the book was published and the storm of criticism it raised in the horticulturist camp was remarkable. The issue might almost have been Free Trade and Protection. The battle raged in the press for a year or two, and then the *Edinburgh Review* summed up the pros and cons in an able article which on the whole decided in favour of formality and the architects' contention.

Shortly after this I was reading a paper on the subject to the Art Workers' Guild, and among the audience was the owner of *Country Life*. He came to me afterwards and said he had decided to bring out an English country house and grounds every week in his paper. This series has been a feature of *Country Life* ever since, and I venture to think it has exerted a very strong influence in the return to the old English way of laying out grounds. It has also kept us so well abreast of contemporary work in this direction that I feel relieved of the need to refer to that this evening.

The later phase of the landscape period devoted much attention to the "specimen" tree. Given a long enough name or exotic appearance, it inevitably invaded the precincts and claimed a position it should never have had. The photograph on page shows a couple obscuring the terrace steps at Fountains Hall, a building which happily retains its identity though most of the garden has gone.

Forest trees in the garden proper should be a matter of careful consideration. If they already exist on the ground to be treated I think we should be careful how we eliminate them and scheme so as to keep the best. By the best I do not necessarily mean the most symmetrical. A distorted tree is often best for shade and its masses may fall



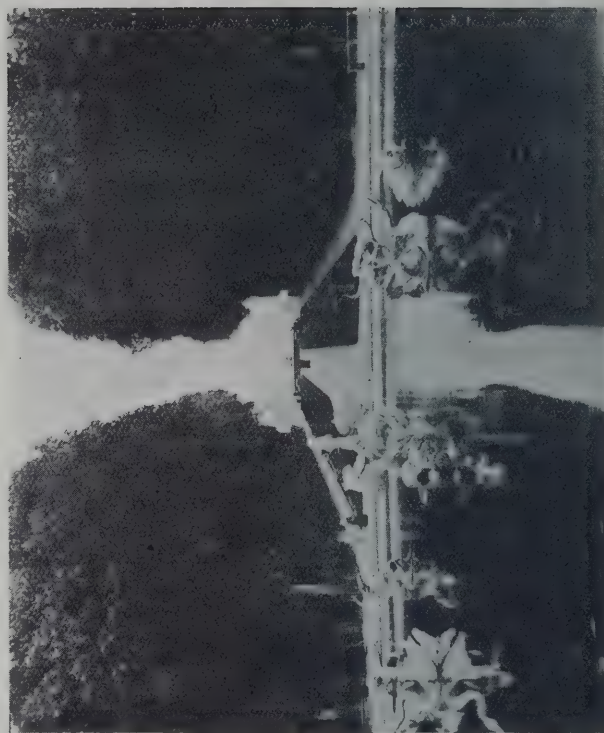
FOUNTAINS HALL



ST. CATHERINE'S COURT, NEAR BATH



BEAL CASTLE



AT VERSAILLES



in the right places for picture making. On fresh, unplanted ground they should, broadly speaking, be kept beyond the walls, as the formation of background is their main function and shade they will naturally give as the sun goes round.

There have been suggestions of late to border the new arterial roads with a varied assortment of trees. But surely what is required is a regiment, not a rabble—sections of beech, sections of elm and so forth, according to the nature of the soil the road is traversing. By any other method no uniformity of size or breadth of colour effect



AT FONTAINEBLEAU.

is possible. The *Araucaria*, for instance, is only in place at Kew. The fine approach to the town of Henley from Nettlebed is one which I think we might well take as a precedent for the new roads.

I have sometimes thought that in English gardens more might have been made of falling water than has been done in the past. Running streams were occasionally introduced as at Beal in Scotland, Littlecote and elsewhere with moderate effect, but more pains were generally taken with sheets of placid water as at Melbourne, or on a grander scale at Hampton Court and Wrest.

At Studley Royal a scheme of canals and pools conceived on a generous scale, but with no particular reference to any building, was made to fill a valley of great natural beauty. It was one of the last efforts of the old dying formalism and seems a good example of what to avoid in similar

circumstances and surroundings. Certainly the valley untouched would have been a more suitable approach to the ruins of the abbey.

In a new garden the texture of any walling there may be is a point of importance, and it should not have to wait for creepers before it is interesting. With intelligent workmen it should not be difficult to get good walling of varied texture in the present day. I used to make them build some walling dry till they had got the notion, and I daresay others have done the same.

Let us now have a look at a few Italian gardens.

And perhaps I should explain here that some thirty years ago I made an attempt to compile a book of Italian surveys, but the publishers saw no sale for it at the time and the work was abandoned. The same task has recently been undertaken—and incidentally been much better done—by Messrs. Shepherd and Jellicoe, whom I must take this opportunity to congratulate most heartily should they happen to be present this evening.

One cannot pass the lake of Como without just noting this fairylike approach to an island garden, but the first I stayed to survey was that at Sampierdarena near Genoa, which the municipality had lately taken over for public use. It was a symmetrical scheme by Galeazzo Alessi, and the only view I have to show of it is this of the wall-fountain below the terrace.

Cetinale, near Siena, was the next. All that survives of this scheme is the backbone, and that is a fairly long one. There is a mysterious spot in the course of it bordered with Chigi ancestors, and possibly a longer search would have revealed other scattered features.

There were certain schemes at Frascati which I had it in mind to visit, and though I believe there was even then some sort of a railroad there I felt this was not the kind of quest to be pursued in that way. So I bargained for a donkey in the fig-market at Rome and set out with bags and a camera on his patient back. But of that presently.

With what remains at Rome Messrs. Shepherd and Jellicoe have dealt pretty fully, but among the slides I find one or two details which I do not remember their giving and will show them accordingly. The first is a grotto arrangement in marble at the Villa di Papa Giulio attributed to Vignola, and the second a wall-fountain at the Villa Madama. (An English solution of a similar problem is the little fountain at Hampton Court.)



ON LAKE COMO

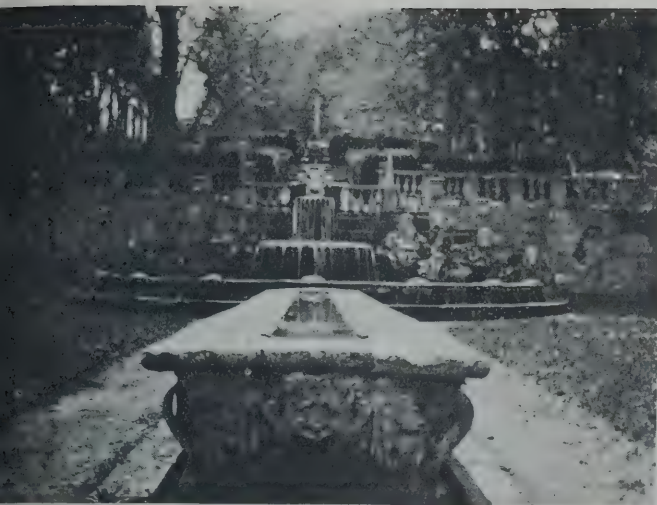


THE CASINO DEL PAPA, VATICAN GARDENS



FOUNTAIN AT THE VILLA TORLONIA, FRASCATI

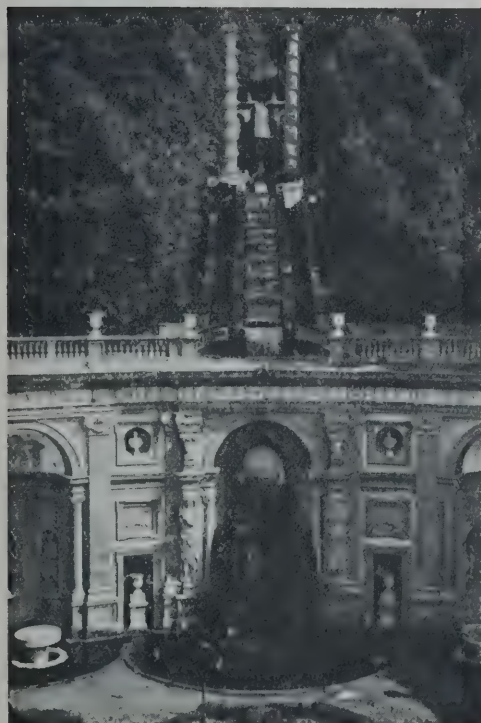




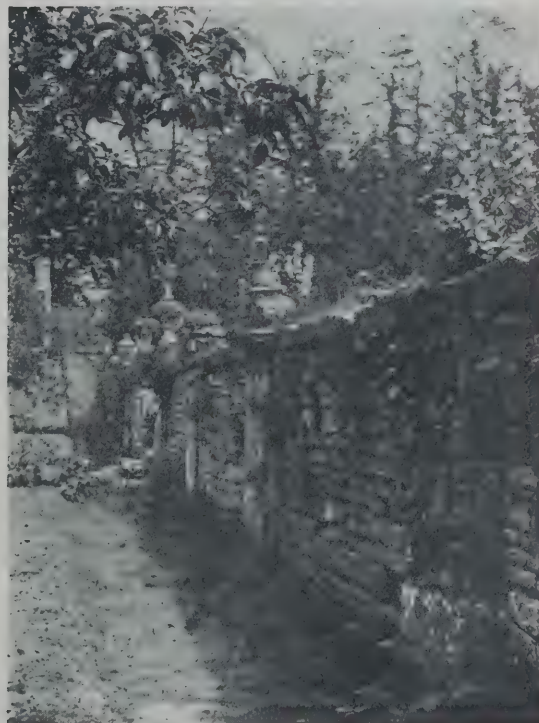
THE VILLA LANTE, LA TAVOLA



A PERGOLA AT THE VILLA LANTE



THE VILLA ALDOBRANDINI, FRASCATI



NEAR BAYEUX

I also came across a slide of the Bosco Parrasio showing the alfresco school and a plan of the approach which at that time was so overgrown as to be very difficult to survey. A plan and section of this is given in Shepherd and Jellicoe. They also give particulars of the Casino del Papa in the Vatican gardens which at the time I speak of was rather difficult of access.

So good are the surveys and photographs in the book I have mentioned that I wish the authors were giving this part of my lecture themselves. It is possible, however, that in the interval of time some details may have disappeared. It should also be understood that, as I was surveying single-handed, I cannot vouch for the same degree of accuracy which they have probably attained.

So much for Rome, and now we are free to set out for Frascati with the donkey. Having covered the twelve miles of Campagna and stabled him at an inn where the wine is Falernian, we can ramble over some of the villas on the hillside towards Rome. The first I visited was the Torlonia.

Not far from this is the Aldobrandini, of which my survey was never completely drawn out and the pencil work appears to have faded, but perhaps there is sufficient to form a guide. Here the centre line is very marked from the entrance at the foot of the hill to the source of the water scheme in the woods above.

Further to the left, with Rome behind us, there is another large villa, the Mondragone. This is boldly raised on a terrace some fifty feet above the olive groves, and at four points in the balustrade rise massive stone columns bearing crosses at the summit. The main block of the building on the terrace is as high as the columns, and I found that two at least of these were chimneys for the vaulted kitchens beneath. There are enclosed gardens in the courts at higher levels, but no fine cascade as at the Torlonia.

Of the Villa d'Este at Tivoli even my survey has disappeared, but I cannot imagine it was ever a very satisfactory scheme. Pirro Ligorio is said to have been the designer, and rather than reduce the number of his architectural features he used the cheapest and roughest of materials, except in one long range of fountain jets where delicate reliefs in gesso decorate every niche.

Of this scheme about half is on the flat and the rest on a fairly steep slope with the Palace at the top. Merlins scream joyously as they swoop from

the putlog holes to the tree tops, but dankness and desolation reign in the gardens, and even the fame of the cypresses was not sufficient in my case to raise any marked enthusiasm.

The Villa Lante at Bagnaia is another matter. The prattle of fountains among fanciful architecture and colour is the keynote of the place. It is characteristic of Vignola in holiday mood, and when I saw it was still inhabited by the Duke of Lante and his family, who, unlike most Italian aristocrats, lived on his estate and farmed it well. The first court you enter by stairs from the village square is the parterre.

On leaving the Villa Lante it was decided for some mysterious reason that I should be accompanied to Caprarola by a farmer returning from Bagnaia to that place, so we rode into the mountains together. The reason turned out to be brigands, and how we fell in with them and got away is another story.

Caprarola is a pentagonal castle round a circular court, and though I think it belonged to the Prince of Naples at that time it was inhabited by a German professor who objected to anyone in the gardens.

Vignola designed the whole: more massively than the Lante and a thought more gravely; but since I could only view the gardens from the windows I have no photographs to show. He seemed to have introduced an idea somewhat similar to the Catena at the Lante for a cascade, and there were fine terminal figures on the terrace overlooking the gardens.

Now for a glimpse at Sicily. You may pass many a place there which has seen better days, but now all that remains is the forecourt or perhaps an isolated temple among the lemon groves.

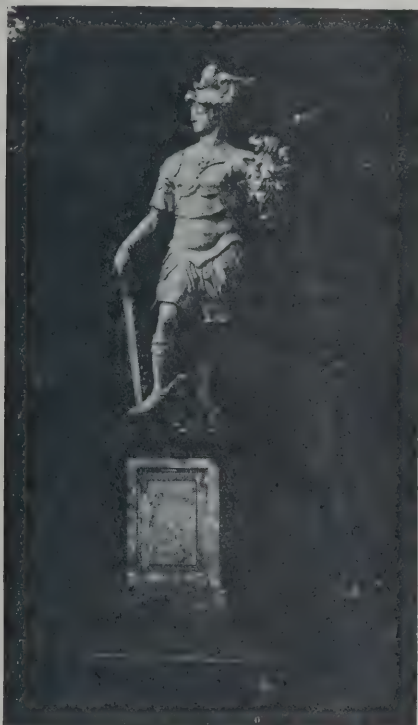
At Bagheria, however, there are some schemes of the Baroque period which claim attention if only for their eccentricity. The Villa Valguanera seems to have had gardens extending up the hill to the terrace, but the house now lies stranded below with its characteristic oval forecourt surrounded by lodgings for guests, who took their meals at the big house cross the court.

The Villa Gamberajia is not far from the Villa Valguanera. There is nothing grave about the entrance, the house itself, or the garden courts.

To return to general principles, it has sometimes struck me that a certain relation exists between loggias or cloisters and groves or avenues. The first mark the passing from covered blocks to open air,



and the second from enclosures to open country. To a certain degree too they depend on the same characteristics in massing. When planning for architectural effect in a building we naturally strive to obtain a certain alternation of light and shade. Glimpses one gets of the courts in foreign towns are rich in this quality, and it is one that admits of infinite variety when introduced in gardens and groves.



LEAD FIGURE AT MELBOURNE, DERBYSHIRE

They are painters' effects, but obtained by the architect with the help of the gardener.

There is no time to discuss all the architectural embellishments that lent a finish to these old gardens, but entrances from one enclosure to the next were generally treated as a feature. There are several by Inigo Jones in the Physic Garden at Oxford, and there is one on page 437 from an old garden near Bayeux.

For vases and figures lead was as freely used in the North as bronze or marble was in the South of Europe.

In the plain of Milan richly decorated clay pots of great size are often met with. They are still made, or were before the War, and would probably be worth importing here as their cost was trifling.

So much for the past. To recent work I have not felt it necessary to refer for reasons already stated. And as to the future, what forecast can we make of that?

Well—when the coal dispute is settled, when the League of Nations is again a happy party, when Moscow has ceased from propaganda and China from British boycott—then, perhaps, the outside



LEADWORK AT VERSAILLES

world may begin once more to buy our British goods.

Surplus funds, a cultivated aristocracy, security of tenure and electric power are, I feel sure, all that is wanted for old England to blossom out again with garden schemes equal to any she has known in the past. And when that time arrives I have no doubt whatever that the genius and energy to carry them out is ranged in the seats before me.

On this note of confident optimism I will, with your permission, bring my remarks to a close.

# The Stone Decay and Preservation of Ancient Buildings

BY PROFESSOR A. P. LAURIE

No. 1

A few months ago I was asked to examine a remarkable case of rapid stone decay.

The walls of the building—a ruined priory—had stood up against wind and weather for hundreds of years. A part of the building had been repointed some twelve years ago, and since then the decay of the stone in the repointed portion had advanced so rapidly that in some cases the stone had receded as much as an inch, the mortar standing out in ridges.

On examination it was evident that the decay in every case was beginning next the mortar, the source of the mischief lying in the mortar itself.

In a paper published by the Society of Chemical Industry I have already described two examples of the infection of stone from mortar, one at Elgin Cathedral and the other at Durham Cathedral. Elgin Cathedral is built of a native sandstone consisting of grains of quartz united by a silica cement, and does not contain more than  $\frac{1}{2}$  per cent. of lime, and yet the surface of the stone is being broken up by sulphate of lime crystals, the sulphate of lime being present to some 2 or 3 per cent.

The source of the sulphuric acid we know only too well. It comes from the burning sulphur in coal. But if the stone had remained in its natural purity the rain containing the sulphuric acid could have soaked into and been washed out of the stone again with little injury, if it had not been caught and trapped by the lime to form sulphate of lime crystals. The only possible source of the lime could be the mortar used in pointing the building. Lime in solution, or lime salts, was probably being absorbed into the stone and meeting the sulphuric acid in the rain and combining with it to form sulphate of lime crystals.

These results were evidently of very serious importance at a time when so much repointing of old buildings is being done.

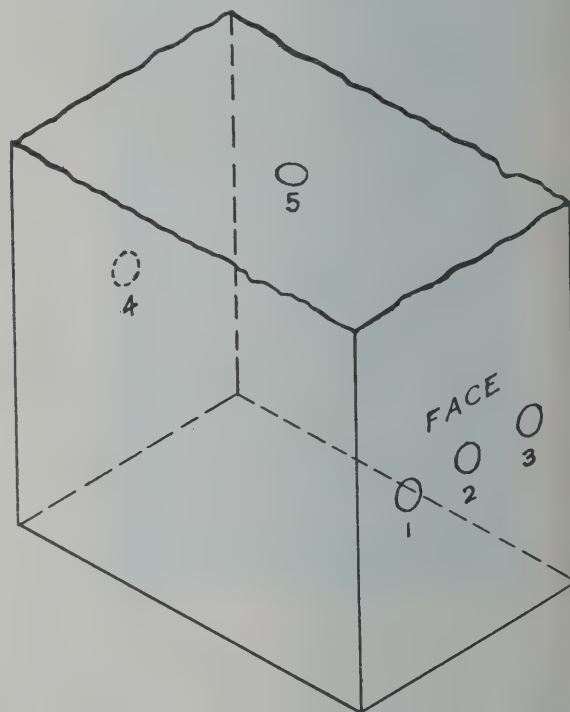
In the case of Durham Cathedral in one corner, where, for many years, a stove had poured forth smoke and acids, the stone was covered with white bunches of crystals of sulphate of magnesia, the source of the magnesia being the mortar for which a magnesium limestone had been used.

It was on account of these results that I was asked to examine the old priory where such rapid decay was taking place.

At the same time I was asked to report on the brick decay taking place in a large building erected outside London some thirty years ago. Here the bricks were in some cases decaying very rapidly, while some general decay was fairly universal over most of the wall surface. An analysis of a portion of the brick, taken

from the heart of the brick, only showed some  $\frac{1}{2}$  per cent. of lime soluble in strong boiling acids, yet some of the brick scale which was crumbling off contained as much as 23 per cent. of sulphate of lime. Here, again, the only possible source of the lime must be the lime in the mortar used in the building.

An analysis of borings taken in the face of the brick confirmed this. Sulphate of lime was found to be present in all the borings, but the borings next the edges of the brick and nearest the mortar showed an



BORINGS TAKEN FROM BRICK

excess of lime present beyond that required to form sulphate of lime. Lime was evidently being drawn into the brick from the mortar quicker than it was being used up by combining with sulphuric acid in the air and in the rain. In this case also the brick, consisting as it did of nearly pure clay, would have resisted for long the action of the sulphuric acid if it had not been for the supply of lime from the mortar resulting in the formation and crystallisation of sulphate of lime.

Here then we have examples both in brick and sandstone buildings of the source of the decay being due to infection from the mortar.

Let us, before going further, ask in what form the



lime is able to penetrate into the brick. In the first place where the mortar is fresh and for many years afterwards it contains slaked lime which we know is slightly soluble in water. Some are under the mistaken idea that the danger of dissolving out lime can be removed by using cement. Portland cement, a year after it has been set, if ground into powder and shaken up with water at once yields a solution of lime, and by repeated treatment lime can be removed in solution amounting to 25 per cent. of the total weight of the cement. In course of time the lime in the mortar or cement is converted into carbonate of lime which is insoluble in water. But the rain contains two solvents, carbonic acid and sulphuric acid, and the soaking into the mortar and coming into contact with the mortar by soaking through the brick will form two slightly soluble compounds, sulphate of lime and bicarbonate of lime, and it is probably these compounds of lime which pass into the brick. Of these the sulphate of lime is by far the more abundant and most important, but the excess of lime near the edge of the brick is probably due to bicarbonate of lime.

Before going further I wish to return to the decaying stone of the old priory which I have already mentioned.

Up to now we have been dealing with either a brick of pure clay or a sandstone consisting of quartz bound by silica. But in many cases the binding material of the quartz particles of the sandstone consists of carbonate of lime crystallised in the form known as calcite. Such a sandstone is readily attacked by acid containing as it does its own element of destruction, as by the dissolving of the calcite in the acid the stone is disintegrated and falls to pieces.

Of such a stone is the old priory built, and, consequently, as it is only a few miles from a large town, the surface of the stone contains sulphate of lime crystals, and its slow decay is to be expected.

What then is the part played by the mortar in this special case?

The reply is that the mortar in this case was found to contain common salt which was percolating into the stone. This is clearly shown by an analysis of the mortar, and a boring into the decaying stone near the mortar and a boring into the stone near the middle. The percentage of salt is higher in the mortar; is next highest in the stone nearest the mortar and is least in the centre of the stone. Moreover the analysis shows that while a drill into the surface of the stone near the centre shows that along with the sulphate of lime and salt the stone still contains a considerable quantity of unaltered calcite, near the edges close to the mortar the calcite has almost entirely disappeared. To the attack of the sulphuric acid in the rain, which would affect the whole surface of the stone equally, is added the salt which is percolating in from the mortar.

What part, then, is the salt playing?

It is evidently assisting in some way, hastening the

destruction of the calcite, but in what way? This can be answered by a very simple experiment. If we crush up roughly some calcite crystals and pour dilute sulphuric acid on them there is, for an instant, a rapid attack which is shown by the rush of carbonic acid gas bubbles rising from the calcite crystals, but this almost instantly ceases and only an occasional bubble rises showing the attack of the acid to be very slow. This is due to the coating of sulphate of lime formed over the crystals which protects them from the acid, like a varnish. If we now add a few drops of the salt solution at once the coating of sulphate of lime is broken up and a violent attack begins and is continued till the acid is exhausted or the crystals are dissolved. Into the reason for this, obvious to a chemist, I need not enter. It is sufficient for our purpose that the salt stimulates the action of the sulphuric acid and hastens the destruction of the stone.

The source of the salt in the mortar in this particular building is somewhat obscure. It is not clear whether it is due to the use of a sand containing salt or due to the situation of the building, close to a tidal river, the salt possibly rising by capillary attraction from the soil under certain conditions of tide. But whatever the origin of the salt the result is sufficient to show the danger of using a sand containing salt in pointing ancient buildings. That it is apt to cause dampness in a building is known, but we now see that it will stimulate the action of the sulphuric acid in the rain and hasten the destruction of the stone.

Let us now return from this digression and consider further the cause of the impregnation of brick or stone by salts of lime obtained from the mortar. On giving the matter further consideration we are faced with the difficulty that this form of decay does not universally occur.

There are miles and miles of streets in Edinburgh built with Craighleith and similar sandstones and mortar. They are constantly being soaked with rain containing sulphuric acid and yet they do not decay. Evidently in this case infection from the mortar is not taking place or they would have long ago been broken up by sulphate of lime crystals. There are miles and miles of brick streets in London which are, on the whole, resisting decay, many of them far older than the building we have been discussing, which lies well outside London. For long I puzzled over this problem, and the answer was first suggested by a brick building which was close to the large brick building we have been considering.

This building was built with a different brick from the one used for the large building, and these bricks are sound and show no sign of decay, but, on the other hand, the mortar is covered with a white efflorescence which on examination proved to be sulphate of lime.

In the next article I shall endeavour to give the answer.

## Bodiam Castle\*

BY NATHANIEL LLOYD

Lord Curzon's monograph on Bodiam Castle was promised us for so long and allusion made to it so frequently by anticipatory paragraphs in the press, that it would scarcely have been surprising had the published volume proved disappointing, as has so often been the case in similar circumstances. That the book more than satisfies expectations is due to two facts—one, the exceptional interest of the building itself; the other, the thorough, conscientious and able way in which Lord Curzon has handled the subject. Many writers (I might almost say most writers) on historic subjects labour under the self-imposed handicap of conclusions formed before embarking upon their task. In consequence, often uncon-

be explored—Charters, Court Rolls, Indentures, Deeds of Sale, Mortgages, the Genealogies of Families, Wills of Persons; the county histories that have been compiled from these and other materials. Information has sometimes laboriously to be extracted from the contents of private muniment rooms, from personal correspondence, from biographies or memoirs, sometimes from family traditions." Lord Curzon seems himself to have conducted even the correspondence of research. I have two letters in his own handwriting, addressed to me on quite a minor point, in which, *inter alia*, he says:—

"I return 'Lower,' whom I have—a painstaking but most inaccurate man. I doubt if there is good authority



Photo by Nathaniel Lloyd, O.B.E., F.S.A.

### BODIAM CASTLE

North Front and ruins of Barbican, 1915, before purchase by Lord Curzon

sciously, they gather materials to support such conclusions and so produce work the value of which necessarily suffers from its partiality. Such was not Lord Curzon's method. He first set to work to gather, sift and weigh the evidence and conclusions of other authorities who had written about Bodiam Castle. Every reference was verified, each inference scrutinised. Then he cast his nets widely into waters from which information concerning the building and its owners might be drawn and, with many new and interesting facts thus brought to light, he tested others' theories and was able to expose many fallacies. I quote his own words, page 14:—

"Sources of parochial and county history require to

\* *Bodiam Castle, Sussex*. An Historical and Descriptive Survey by the Marquis Curzon of Kedleston, K.G.

for the 1405, which would have meant that the castle took nearly 20 years in building, whereas in those days they built huge fortresses in a few months or at most years. No doubt Bodiam has owed a great deal to petty local spoilage, but it is difficult to believe that so complete a disappearance of the interior could have taken place without some greater and more overt act of violence."

Such was the thoroughness of the man.

Page 15. "All these sources of information have been diligently searched in the preparation of this book."

Castles may be divided into two classes:—

1. Ancient residences, composed of the accretions of many periods.
2. Picturesque ruins, of which many and important



features have become obliterated or have entirely disappeared.

Bodiam, alone, stands substantially unaltered from the fourteenth century, when it was built by that predatory knight of fortune Sir Edward Dalyngrigge. "It is the most perfect and splendid extant example of its style" and, further, "it is the first castle built in the Perpendicular style, on the very threshold of the Perpendicular epoch."

Such is the gift Lord Curzon made to the nation, and it is its history that he has recorded.

Amongst many current errors in the history of Bodiam Castle, one is effectually exploded—that the castle was never occupied. Originally only a surmise, based upon no evidence worthy of the name, this idea had almost crystallised into fact. However, abundant evidence has

(by comparison with contemporaries) "a highly desirable residence"; and as such it was occupied for nearly three hundred years.

Lord Curzon tells us of the building of the castle, of Lewknors, Dalyngrigges, Wardeaux and all who were connected with the place; of the "slighting" or dismantling of the fortress by the Parliamentarians; of its purchase in 1829 by Mr. Thomas Fuller of Brightling, to save it from absolute destruction; of its later purchase and repair by Lord Ashcombe, then Mr. George Cubitt, and finally how he himself acquired, explored and repaired it, preparatory to handing it over to the nation. The speculations which resulted in the discovery, in the bed of the moat, of the cills of the original trestle bridges are excellent instances of archæological deduc-



Photo by Nathaniel Lloyd, O.B.E., F.S.A.

BODIAM CASTLE. SOUTH-EAST ANGLE

During repair by Lord Curzon. The open joints in masonry below Mr. Cubitt's "waterline repairs" are clearly to be seen

been gathered proving that the castle was occupied by its owners and by tenants for many generations, even far into the seventeenth century. It would have been surprising had the conclusion been otherwise. The building was convenient—almost luxurious—for its times. Every room had a fireplace and a chimney—the external treatment of the chimneys is most interesting. There were no less than 14 garderobes, or mural latrine shoots, which discharged a foot from the bottom of the moat. The S.W. tower contained a well, fed by springs. There was even a hot air flue from the Bower fireplace to warm the room above. A domestic chapel was, of course, included, while more than ordinary protection was afforded by the situation and by the building itself. Though the dampness of the position, scanty window areas and inadequate heating make the castle appear to modern eyes gloomy, chill and comfortless, it was actually

tion. The principles and methods adopted in clearing away injurious vegetation, repairing foundations and the chariness in inserting new work as restoration are worthy of study.

The book's faults are almost entirely due to the author's death having prevented personal correction of the proofs. Had he been able to do so, such blemishes could never have occurred as:—

- Page 16. Carent for carens.
- " 58. Lancettée for dancettée.  
Engraved for engrailed.
- " 60. Hall oriel, for a window flush with outer wall.
- " 61. Richard for Robert Knollys.

138. The use of the expression "banqueting hall" is open to serious objection. The mediaeval hall was the nucleus

of the home, originally the only apartment, and it was the common room of the whole household, where its occupants ate and played and slept. It was not constructed or intended for any special purpose and the term "banqueting" is misleading. It is doubtful whether the term "banqueting hall" is of any great antiquity, certainly it was not current in mediaeval times. It is rather a term of modern romanticists.

140. The plate opposite this page, identified as the "Kitchen," is actually the Servants' or Retainers' Kitchen.

We are grateful to Lord Curzon for giving us Bodiam; we are doubly grateful to him that he did not give effect to the intention that he once had of restoring the interior

as a residence. To have done this would have been a grievous error. It would have been equivalent to tampering with a beautiful and ancient document. Such restoration could never have been satisfactory, though it might have made the ignorant gape and strive to emulate the feat by spoiling other old buildings. The new work would certainly have overpowered the old, destroying much of its interest, for who can now look upon Bodiam Castle, standing grim, gaunt and massive, girt about by its broad moat, just as it appeared 500 years ago and not feel moved in realisation that it is the real thing, which stands there entirely unspoiled by the conjectural touch of busy restorers.

## The Preservation of Rural England\*

BY PROFESSOR S. D. ADSHEAD

The necessity for taking action in the preservation of Rural England is every day becoming both more obvious and more urgent.

In a recent letter to *The Times*, the President, Mr. Guy Dawber, has directed public attention to the irreparable damage that is being done. More recently he has called together the presidents of societies and representatives of local authorities with a view to finding a remedy. Professor Abercrombie's work is an important contribution to the deliberations of this body.

All the causes that have been instrumental in bringing about this deplorable effervescence of urban existence are not easily ascertainable or generally understood. On close examination they are found to be as deep-seated and as fundamental as the roots of the social system from which they emerge.

Obviously, the dynamic force "transport" is the direct cause, but, as Professor Abercrombie suggests, the static forces "urban development" and "rural change" are really the more important.

It is necessary, before prescribing a remedy, to diagnose the present condition and to be quite clear as to what is really happening. Professor Abercrombie's expression "ribbon development" is a dramatic one, but in point of fact the analogy is not a good one. Developments are not taking place all along our main roads as the expression would suggest. What he describes as "radiation" development is alone what is really happening. His "ribbon" development is, in truth, ordinary "radiation" development in exaggerated and extended form. It is most important to realise this, and an examination of any of our main roads will prove the truth of this assertion. The road from London to Birmingham reveals miles and miles of open country

between the outskirts of towns like St. Albans and Dunstable, as also do the following roads, all of which have been recently traversed with a view to finding out what transport is doing:—The Leicester-Nottingham road, the Manchester-Blackpool Road, the Chesterfield-Manchester Road, the London-Canterbury, London-Basingstoke, and London-Brighton Roads; also the South Coast roads from Dover to Bournemouth. An examination of these main roads reveals singularly little development between towns, the most insidious features being the roads themselves and the petrol stations which, like signal boxes, are rapidly being fixed at regular intervals, whether in town or country, along all main roads.

In reality, and fortunately, the country is not as yet being spoiled, nor are the great majority of our country villages. The real trouble is the uncontrolled sporadic spread of our towns, in particular, the larger towns, but not entirely, for the same destructive agencies are at work wherever industry and so-called modern progress go hand-in-hand.

As Professor Abercrombie suggests, the remedies are many, but it would be well to emphasise the following:—

(1) A more enlightened administration of the Town Planning Act;

(2) A clearer perception of what we mean by rural industries and village development and reconstruction.

(3) Land nationalisation in its application to the acquisition of scenery and rural areas of peculiar character and charm.

Much more can be done with the Town Planning Act, given a feeling for good architecture in its administration. Up to the present town planners have been concentrating their energies on deciding such vexed questions as: the number per acre, the use of the area, and the depth of the building line—all very useful and important matters for consideration. But, after all, how little these things count with the

\**The Preservation of Rural England. The Control of Development by the means of Rural Planning.* By Professor Patrick Abercrombie. (The University Press of Liverpool, 1926.)



cultured traveller or even the man in the street if the buildings exhibit ugly, vulgar, and deplorable architecture.

The President takes the correct view of the situation. Good village planning, good town planning, and sterilisation of land may do much to alleviate the situation, but without drastic control of the architecture of the façades of the cottages and utilitarian buildings that align our main roads control of these dynamic and static forces will count as nothing.

What do we see just outside every progressive town? Buildings erected of highly artificial and cheap materials, experiments by amateurs, houses erected by speculative builders, who are too old to appreciate anything but the worst that disfigured our towns before the war; and, last and perhaps not least, the architecture of the self-styled practical people who, blind to all æsthetic feeling, love high ceilings, plate-glass, bricks that will not discolour, and see nothing in the house but labour-saving appliances, endurance and sanitation.

There should be far more control in regard to the architecture of street façades. The local authorities, as at present constituted, are not qualified to undertake this, but, as Professor Abercrombie points out, Ruislip, Northwood, Birmingham, Bath, and Oxford have each of them set up machinery more or less adequate for dealing with this increasingly important aspect of town planning.

As regards the setting up of rural industries and the practice of village planning, here we are on dangerous ground; we are touching a drastic change in our rural social system. The sugar beet factory or the creamery, to say nothing of the more extraneous engineering shed, has no counterpart in the rural village of the eighteenth century. Instead of crafts and home industries we now have factories. The proper place for these, if they are to be admitted into the system, is surely in well-chosen and restricted areas. They must not be allowed to encroach on our priceless peasant system. This must be so if we are to preserve Goldsmith's *Deserted Village*, Borrow's gipsy retreats, or the village so graphically described by Sir Walter Scott in *The Heart of Midlothian* when Jeanie Deans travels from Edinburgh to London.

The factory system and mass production has no place in agricultural England. Encouragement should be given to the smallholder, rather than to agricultural syndicates employing a hundred hands, if the old method of landowner and tenant farmer is to end. Taking the country over, it is not the Ministry's Rural Housing Schemes that have done damage to our villages. These are in the main well-designed and schemed as groups apart from old villages. The rural cottages of Mr. Skipper, of Norwich, are an excellent example of what many of

our architects can do, as are the cottages for smallholders that have been built by the Ministry of Agriculture.

Professor Abercrombie's study of the subject is invaluable as giving a brief account of the many organisations and authorities engaged in one way or another in preventing injury to, and in developing rural England. Presumably it is presented as a survey of the situation, and as such it is admirable. It yet remains to find the remedy.

#### MODERN PLASTERWORK CONSTRUCTION:

Casting and Fixing: Fibrous, Solid, and Reinforced.  
By George P. Bankart, Author of "*The Art of the Plasterer, etc., and G. Edward Bankart.*"

All architects who take an interest in the craftsmanship side of their profession are familiar with Mr. Bankart's work both as a practical plasterer and a writer on his special craft.

The book under consideration—a folio of excellent diagrams drawn mainly by Mr. G. Edward Bankart—deals with plasterwork as an item in the construction of the building. The subjects chosen, however, which include drawings of domes, columns, ceilings of various shapes, cornices, wall panelling and so forth, are all interesting, and, as the author says: "Although the matter of 'design' and details takes second place in these plates, which are intended to illustrate construction only, we have considered it advisable to give examples of good design rather than otherwise. The principle of construction remains the same in either case."

The clear, well-drawn plates are fully described in the notes at the beginning of the volume, and much useful information is given as to sizes and arrangement of battens, and the method of dealing with canvas backings, which should be helpful to anyone setting out plaster details.

The work refers almost entirely to cast fibrous plaster. Perhaps one of these days Mr. Bankart will give us a little treatise on wet plaster and its finishings. For those of us who do not like the hard mechanical finish of ordinary modern plasterwork there is a good deal to be learnt in this respect.

In his previous book, *The Art of the Plasterer*, Mr. Bankart dealt with the decorative development of plaster from the sixteenth to the eighteenth century, and produced an admirable record of much of the work in this country.

These two books on plasterwork cover a great part of the field, but Mr. Bankart is apparently already at work on a third book on the subject, for he says at the end of his preface: "Plaster work design, which is a matter of personal expression and degree of 'taste,' is being dealt with in another series of one hundred working drawings which have been prepared by us and which are now in the press."

We shall look forward with interest to the production of this third volume, in which we shall hope to get the designs of the craftsman himself unfettered by irksome restrictions.

ARTHUR BARTLETT [F.].

## Waterloo Bridge

The R.I.B.A., in conjunction with the various Societies which are represented on the Waterloo Bridge Conference, is still actively opposing the destruction of Waterloo Bridge, and members may be interested in reading the letter printed below, which was sent from the Conference to the Prime Minister in January last in order to show the grounds upon which Parliament might properly take action. In view of the discussion of the L.C.C. Money Bill which took place recently in the House of Commons, the Society for the Protection of Ancient Buildings, on its own account, reprinted this letter and the report which was sent by the Conference to the County Council in June 1925 and forwarded copies to all members of the House. A second letter was addressed to the Prime Minister on 1 June.

### COPY OF FIRST LETTER TO THE PRIME MINISTER

15 January 1926

SIR,—I beg to approach you about the preservation of Waterloo Bridge as chairman of a Conference of the following societies and individuals concerned in the maintenance of this historic monument :—

The Royal Academy of Arts,  
The Royal Institute of British Architects,  
The Society for the Protection of Ancient Buildings.  
The Town Planning Institute,  
The Architecture Club  
and a group of 17 Civil Engineers.

In February 1925 a deputation urging the preservation of the bridge waited on the London County Council and was invited to submit considered arguments to show that the course advocated was feasible. Further enquiry was accordingly held, and a memorial was prepared setting out the æsthetic value of the bridge, its historic associations and its harmonious relations with the architecture of Somerset House. The technical problems of conservation were investigated with the greatest care. Engineers of acknowledged experience and well versed in all the most modern methods of practice satisfied themselves that the bridge, in spite of subsidence seriously aggravated by the grouting operations carried out by the L.C.C., could be preserved at a moderate cost and with the minimum danger to life and limb. In the opinion of my Conference our claim that the bridge could be maintained was fully established. We showed, moreover, that the alternative of a new six-line bridge was extravagant in cost and likely to enhance rather than diminish the congestion of traffic, especially if, as forecast, the bridge is to carry a double line of tramways.

On 15 December 1925 the subject was discussed by the London County Council and our recommendation to review the situation was defeated by a substantial majority. The matter is one of such national importance that we feel justified in appealing to His Majesty's Government. We should not suggest Government intervention on a matter solely affecting Municipal affairs, but this is a case where national credit is concerned, and where interests of the Government and taxpayer are directly involved.

(a) The State is interested alike as owner of Somerset House and as guardian of the Duchy of Lancaster property. The injury to Somerset House cannot fail to be grave as the dignity of its famous façade to the Thames—not merely respected but enhanced by Rennie's masterpiece—will be grievously impaired by a modern structure twice the breadth of Waterloo Bridge. In order to protect Somerset House the Treasury has always retained rights over the adjacent embankment, and no encroachment can be made without the assent of the Government.

(b) Again the amenity of the two frontages in Wellington Street and the convenience of those engaged in these buildings must be prejudiced by the increased congestion which must inevitably occur in this street if a wider bridge is built. In its original scheme the L.C.C. proposed to carry traffic below the Strand by subway, thus linking the bridge with Aldwych. Without some such relief the addition of three lines of traffic to the three lines already carried by the bridge must produce congestion of traffic at the bridge head, and the condition of the Strand will not only be serious in itself but will react to the detriment of transport for a considerable distance in all directions.

The L.C.C. resolution of 24 February 1925 laid down that the subway should be an integral part of the road improvement. No reference was made on 15 December to this subway, doubtless for good reasons connected with levels and gradients which would not permit the passage of omnibuses, double-deck trams or other vehicles requiring ample headroom. This raises a fresh aspect of the question, and as it appears inevitable that so far from diminishing congestion the scheme will now increase it, the case against widening Waterloo Bridge is emphasised.

(c) Traffic congestion involves waste of time and money. Not only is this new bridge needless, but it will be expensive compared with the cost of strengthening the present structure. No proof has hitherto been adduced to show that traffic crossing the bridge requires twice the space now available. So heavy an outlay is contemplated on a new bridge where it is not required that on the one hand increased demands will be made upon the Road Fund, together with further claims for Government contributions in lieu of rates, while, on the other hand, bridge building in districts where the demand is insistent and generally admitted will be suspended for want of funds. The destruction of Waterloo Bridge must therefore postpone far more urgent improvements elsewhere, without advantage to London traffic or finance.

(d) The L.C.C. differs from Municipal authorities generally in that it is not a traffic authority. This responsibility is vested in the Ministry of Transport (with its Traffic Advisory Committee) and in the Metropolitan Police. Traffic considerations of such magnitude are involved, and the ultimate effects of destroying Waterloo Bridge will be so far-reaching that we urge the necessity of immediate enquiry by the Government into the whole question of the London communications with special relation to Thames bridges. The L.C.C. not being the authority for roads, traffic, police, or waterway, and not having control over the city bridges, is not in a position to



review the situation in a comprehensive manner. The crucial matter in our opinion is the necessity to save Waterloo Bridge, to avoid fresh congestion, and to devote available funds to pressing needs in other parts of London.

(e) It is common knowledge that the First Commissioner of Works was prepared to conduct an enquiry into the stability of the bridge. Having asked for further investigations, my Conference was officially invited by the L.C.C. to indicate a suitable tribunal, and we suggested that the First Commissioner, as a Minister of the Crown and uncommitted on either side of the controversy, would be eminently fitted to establish a tribunal at once impartial and authoritative. To this proposal we received no reply. Nor indeed were our arguments, whether technical or based on the historic aspect of the case, rebutted. We feel that the country is being deprived of a precious, indeed of a unique and irreplaceable asset. The importance of Waterloo Bridge itself would fully justify the intervention of H.M. Office of Works as London is lamentably poor in monuments of world-wide fame. There are perhaps six or seven which can rank with the acknowledged masterpieces of Europe, and London is rapidly losing the artistic associations of its great historic past. Of Roman London, probably the second largest town north of the Alps, nothing remains. Fine buildings, such as Newgate, have had to be destroyed; the Bank of England is in process of conversion; City churches are threatened, and the removal of Waterloo Bridge will impoverish our country as a whole. Informed foreign opinion has expressed its chagrin in no uncertain terms, and you are doubtless aware that the Press throughout the country, with negligible exceptions, has earnestly advocated reconsideration.

We presume that the Office of Works does not consider is a case in which its intervention by means of a Preservation Order, under the Ancient Monuments Act, could be properly invoked: and on the assumption that the Department has considered the case in all its bearings we do not feel entitled to press the point. We beg leave, however, to urge that apart from scheduling the bridge the responsibility of H.M. Ministers cannot be disregarded, for direct public interests are closely concerned, while the general interest and credit of the nation are likewise at stake. We cannot afford to incur the charge of ignorance and vandalism brought against those who make no effort to preserve the surviving achievements of our national character and distinction.

On behalf of my Conference I submit that the Government should withhold consent to the destruction of Waterloo Bridge until further enquiry has been held.

Should you desire further elucidation of our views, members of my Conference will, of course, wait upon you, and at a later stage we may express a hope that no objection will be taken to the publication of this letter.

I have the honour to be, Sir,

Your obedient Servant,

(Signed) ARTHUR KEEN,

Chairman of the Conference of Societies  
urging the Preservation of Waterloo Bridge.

The Rt. Hon. Stanley Baldwin, P.C., M.P.,  
Prime Minister,  
10 Downing Street, S.W.

## COPY OF SECOND LETTER TO THE PRIME MINISTER.

1 June 1926.

SIR,—On 15 January I had the honour to submit an appeal prepared by various societies, assisted by a number of Civil Engineers, asking the Government to intervene for the preservation of Waterloo Bridge, and at the same time to conduct an immediate enquiry into the whole question of London communications, with special relation to the Thames bridges.

While we regret that the House of Commons has recently passed the Money Bill authorising the removal of Waterloo Bridge, we note that Colonel Ashley has announced that he is "reviewing the question of the London bridges as a whole." The grant towards the St. Paul's Bridge indicated some time ago by the Ministry of Transport is accordingly in abeyance.

Four months of valuable time have elapsed since we made our suggestion, and the situation has become more difficult during the interval. It is stated that the river-bed at Waterloo Bridge is undergoing modifications, and that the scour is increasing, possibly owing to unforeseen causes arising from the temporary constructions. Traffic over the new steel bridge is only permitted at a foot's pace. It is generally known that Westminster Bridge requires close and constant observation.

The whole question of London bridges is being allowed to drift. The matter becomes more urgent every day; apart from the historical and æsthetic importance of Waterloo Bridge, we wish to emphasise certain aspects of the general traffic question. The proposal to erect a new bridge at St. Paul's, the southern end of which is only 270 yards distant from Southwark Bridge (now remarkable for the paucity of its traffic), is unlikely to improve transport facilities and in any case gives rise to deep anxiety amongst those in charge of the Cathedral fabric. The bridge in question would be erected by the City of London, within their own area, and paid for mainly by their own funds. It has never been suggested that if a single authority were responsible for London bridges as a whole, such a site could conceivably be selected.

Meanwhile the suggested destruction of Waterloo Bridge raises serious traffic problems. Between three and four years were required for the removal of Vauxhall Bridge. At Waterloo tidal forces are more powerful, the curve of the river is more pronounced, and the complication of the adjacent steel bridge enhances the difficulties of demolition and replacement. The very existence of this new bridge will intensify the navigation problem while the old bridge is being centred for removal. Had the London County

Council accepted our scheme when approached by my Conference in February 1925, much of the necessary strengthening of the old structure would to-day be completed.

One must therefore contemplate a long period for demolition, during which the space within the arches will be blocked by their timber supports, followed by three or perhaps four years needed for reconstruction. Throughout this period traffic will be diverted to the metal bridge, which with its narrow width, its speed limit, and awkward approaches, will be inadequate even for its temporary purpose. Westminster Bridge cannot carry much more diverted traffic. Lambeth Bridge is remote and cannot be completed for several years—and London is therefore threatened by a traffic congestion which will react upon the whole commercial life of the capital.

It appears to my Conference that through prolonged delay, and injudicious treatment of Waterloo Bridge, the gravity of the situation is daily increasing. No effort is being made to protect the foundations of Waterloo Bridge from scour pending removal, a course of action which is imperative whether demolition or preservation be determined.

My Conference feels justified in approaching you at a moment when your time is greatly occupied, owing to the large and far-reaching issues involved. A superfluous bridge is projected at St. Paul's, a valuable bridge is to be sacrificed at Waterloo, and at the same time no steps have been taken to deal with the Charing Cross Bridge which is vital to the development of a very large area of South London. On behalf of my Conference I beg leave to ask that we may be allowed to amplify, before the new enquiry, the views broadly outlined in this letter.

I have the honour to be, Sir,

Your obedient servant,

(Signed) ARTHUR KEEN

Chairman of the Conference of the following Societies urging the Preservation of Waterloo Bridge :—

The Royal Academy of Arts,  
The Royal Institute of British Architects,  
The Town Planning Institute,  
The Society for the Protection of Ancient Buildings,  
The Architecture Club,  
The London Society, and a Group of Civil Engineers.

The Rt. Hon. Stanley Baldwin, M.P.,  
Prime Minister,  
10 Downing Street, S W.

#### WATERLOO BRIDGE.

A memorial to the Prime Minister earnestly pressing upon him "the need for further inquiry into the whole problem of London traffic and bridges before the fate of Waterloo Bridge is finally determined," was prepared in connection with the conference of societies interested in the preservation of Waterloo Bridge and delivered to 10 Downing Street. It contained the signatures of several hundreds of men (including the President of the R.I.B.A. and the President of the Royal Academy) and a distinction in every branch of life.

Further signatures will be received by Mr. Arthur Keen, V.P., at No. 9 Conduit Street, W.

A further plea for the preservation of the bridge was formulated in a letter to *The Times* on 7 June by nine French architects who have been visiting this country in connection with the meetings of the Franco-British Union of Architects which have been held at Canterbury. The signatories were :—Messieurs A. Bérard, Armand Brue M. Chrétien-Lalanne, A. Defrasse, A. Legros, Georges Lisch, A. Louvet, J. Remaury and C. Schneider.

The Conference of Societies urging the preservation of Waterloo Bridge desire to suggest to all architects that they would best help the efforts which are still being made to save Waterloo Bridge as it stands by refraining from publishing letters or drawings containing ideas or suggestions for improvements and alterations to the existing structure.

#### THE ARCHITECTURE CLUB AT LANSDOWN HOUSE.

Mr. H. Gordon Selfridge gave an At Home at Lansdowne House on 8 June to the Architecture Club, of which he is a member. The company, which numbered 200, was received in the Library by Mr. Selfridge and his daughter, Princess Wiasemsky, and the function proved to be one of the most successful and enjoyable gatherings in the Club's history. Mr. Selfridge, having kindly arranged that all the principal apartments should be open, his guests were able to see not only the magnificent collection of pictures, statuary, illuminated manuscripts and other art treasures which the house contains, but also to obtain a very good impression of the architectural merits of this notable example of Robert Adam's domestic work. There were varying opinions about the examples of Adam decoration to be seen, some preferring the painted decoration of which the drawing-room is an example, while others inclined to the plain plaster-work of the great dining-room. There was unanimity, however, about the excellent proportion of the rooms, which, despite their size, led some of the guests to believe that they were smaller than they had supposed. It was difficult to realise that the great dining-room can seat 100 people comfortably or that a dance for 800 can be given in the Sculpture Gallery forming the Ball-room, where, by the way, some of the company were able to indulge in dancing during part of the evening. As an example of a town mansion, suitable for entertaining on a large scale, Lansdowne House has the great virtue of not seeming too vast for the homelier atmosphere of the ordinary domestic regime. J. H. E. D.



## Reviews

MODERN BUILDING PRACTICE. By William Harvey. (*The "Little Things that Matter" Series: Vol. II*). 80, London 1925, 5s. [*The Architectural Press*.]

Mr. Harvey's small volume has a value greater than its title would suggest; it is itself, in fact, one of the "Little Things that Matter," if one may jest with the happily chosen title of the series of which it forms the second volume. The first chapter indicates his method of treatment. He deals with the hackneyed subject of a plan for a dwelling-house, but adds much to the ordinary maxims found in building-construction manuals by drawing from his own experience. Thus he shows how the builder's haphazard method of utilising the precious "top-spit" and garden mould for raising the level of a site, instead of heaping it up "for use where directed," though it may save a little labour and money during building, later drives the gardener to despair when he finds that "infertile subsoil" and brickbats form his new flower-beds. Then Mr. Harvey says some very sensible things about brick steps and garden paths, most of them common knowledge to an architect who has been in practice for a few years, but apt to be overlooked by a novice trained to design in the grand manner. Then he takes us for a short tour round "the usual offices" of an isolated country house, discussing the respective advantages of earth-closets, septic tanks, cesspools (with or without an "accidental" hole at the bottom), and so on, offering sound advice as to the position that these necessities but often unpleasant contrivances should occupy in relation to the prevailing wind. His third chapter opens with a passage which is surely written from the heart: until the practice of housewifery is itself established on a firmer and more scientific basis there can never be any generally accepted standard of fitness in the planning of a dwelling house in respect to the accessibility of its household stores. Personal taste and judgment, on personal whim, enter into housekeeping, and though a housewife is thoroughly efficient in the management of certain existing premises, lack of technical training, or of imagination or ability to understand a drawing prepared in accordance with the rules of orthographic projection, may come between her and the arrangement of plan best adapted to her needs when the opportunity presents itself of building a house to suit her own requirements.

A spirit of make-believe in social matters may also pervade and induce the client to disguise from the architect the real nature of the proposed methods of household management."

The woman architect, now being produced in vast quantities from our colleges and schools of sound learning, will doubtless ponder over this solemn indictment. Mr. Harvey's hints on "labour-saving devices" confirm our opinion that much of the chatter on this topic is inspired by interested parties who have some impossible "gadget" in mind, and emphasise the regrettable facts that the best planned house inevitably entails a good deal of labour and that many labour-saving devices, such as lavatory-basins and bedrooms, involve considerable initial outlay.

The remaining chapters—"Ventilation without

Draughts"; "Keeping out the Weather"; "Leaky Windows and Doors"; "Reinforcement in General Practice"—maintain the same common-sense standard. The book is well written, enlivened with touches of humour, and admirably illustrated by drawings achieving their aim with a notable economy of line. In collecting these miscellaneous essays within one cover, Mr. Harvey makes no attempt to produce another text-book on building construction, but rather to supplement such a volume with practical hints that more ambitious writers too often take for granted. Many a practising architect who has fallen into some of the pitfalls against which Mr. Harvey here warns him would have welcomed this little book in his early years, and architectural students with their eyes on the top of the ladder may be reminded that many a promising career has been ruined by disregard of these numerous and disconcerting "Little Things that Matter."

In one thing, the choice of a title, Mr. Harvey has perhaps made a slip. "Building Practice" is a term commonly used to denote the system of economic rules adopted by a builder in the commercial conduct of his business, and as such is a recognised subject of instruction in schools of building. It is hardly applicable to a slender volume of essays on disconnected aspects of modern construction.

MARTIN S. BRIGGS [F.].

THE WEST END OF YESTERDAY AND TO-DAY.  
By E. Berresford Chancellor. 40. Lond. 1926.  
£2 2s. [*The Architectural Press*.]

Mr. Chancellor is a pleasant cicerone; his guidance avoids the formal; his book is, as he tells us, a gossip upon old streets, and buildings that are in many instances no longer with us. Although he naturally deplores the loss of many landmarks, he accepts the changes or "improvements," as inevitable.

"Improvements" is an official term that may almost, at first sight, deserve the lie direct, but the transformations which have taken place were doubtless demanded. Still, schemes praiseworthy in their conception may ask for much forgiveness in the matter of their execution. The Charing Cross Road can only be accepted by virtue of its old book shops. Yet what an inhospitable spot it offers them in contrast to their ancient home in Holywell Street, with Wych Street lying behind it, winding its way from Clement Danes into Drury Lane. Here were many old houses of Tudor time with gabled fronts and floors overhanging the pavement—a type almost extinct. Yet Holywell Street and Wych Street had to go, and Clare Market too. And with them, although Mr. Chancellor spares us the information, went five theatres, the Olympic, Globe, Opera Comique, the old Gaiety and the Strand, all to make room for Kingsway and its "Island Site." Theatre-land removed itself to the new Shaftesbury Avenue, and the face of the Strand has worn a chastened appearance ever since.

Such atmospheric changes are as disquieting to the old Londoner as the local transformations. Yet, instinctively pedestrian as he probably is, he is but partially affected by these changes, for much that he has cherished remains to him. Lincoln's Inn Fields, Soho Square and Leicester

Square are the strategic points between Holborn Bars and the west, and the ways that run through them give him command of what is still the most varied and interesting part of London west of the City. Lincoln's Inn, Great Queen Street and Long Acre form, too, a direct route happily impassable to buses.

His steps may take him through many curious ways like Foubert's Place, Rupert Court, Walker's Court with its adjacent fruit market, or Goodwin's Court, to name four of the illustrations, and these have changed but little with time. Foubert's Place leads into that curious neighbourhood that lies east of Regent Street, which always seems to possess a singular detachment. Carnaby Street, West Street and Brewer Street (which might be a provincial High Street) with Broad Street, Soho, are presided over by those twin campaniles of the St. James Electric Power Station, which present so unique a picture behind Golden Square when viewed from the Regent Palace Hotel.

There are some spots which, as the author points out, will always be associated with old residents, such as Bolt Court with Dr. Johnson, and Charles Lamb with the Temple, to which might be added Great Russell Street, where he lived in touch with his beloved play-houses, and where Mary, as he whimsically informs us, could watch the prisoners being taken to Bow Street. Reynolds's kindly spectacled face greets you in Leicester Square, where too, if you are lucky, you may catch a glimpse of sweet Angelica Kaufmann.

In Whitcombe Street, leading down the hill, stands that grim bit of brickwork, with its entrance flanked by iron bollards, of which R.L.S. made such sinister use in *The Dynamiters*. There are sights, too, in more formal setting. That of the Foundling Hospital as it groups itself at the end of Lamb's Conduit Street, the east end of St. Anne's, Soho, looking up Church Street, or the portico of the Haymarket Theatre closing the vista across St. James's Square from St. James's Street, a quarter of a mile off.

If this notice has kept to the by-ways rather than the high-ways, it has been in recognition of an affection that Mr. Chancellor does not conceal for London dressed in sober habit. Yet he can do her full justice when decked for display. Her streets, buildings and monuments that have their origin in the Augustan Age of the Regent, are described and illustrated by Boys, Shepherd, and other contemporary artists, whose handling of such subjects has never been excelled.

C. J. TAIT [F.].

#### SKETCHING IN LEAD PENCIL FOR ARCHITECTS AND OTHERS. By Jasper Salwey, A.R.I.B.A. 80. Lond., 1926. [B.T. Batsford.] 7s. 6d.

This new book by Mr. Jasper Salwey follows closely upon his other recent and more comprehensive work on draughtsmanship in lead pencil. Between the two the author draws the distinction that, whereas the larger book is meant to cover the full scope of pencil as a drawing medium, the smaller volume now issued is concerned only with sketching; drawings rapidly done and limited to the recording of essentials as distinguished from laboured

and more highly finished pictures. The subject is approached by Mr. Salwey essentially from the architect's standpoint, and is, indeed practically confined to the drawing of buildings. The equipment necessary for the search for and choice of subject, the process to be employed for the production of useful and attractive representations of buildings and their features, are set out for the guidance of the draughtsman, but the earlier stages of training are assumed to be past—for no attempt is made to cover the groundwork found, for example, in such works as those of J. B. Harding, that, in their painstaking basic principles and technical excellence, are still of real value.

The methods that Mr. Salwey advocates have all their force to be derived from a large number of his own admirable illustrative drawings, of which Nos. 8, 17, 20, 32, and 37 may be particularly noted. Some fine examples by Eden Nesfield, A. E. Newcombe, Kenneth Conant, Clark Hutton, Harold Falkner, Frank L. Emanuel, and others, are used to show various qualities in drawing to which attention is directed. In our opinion Nos. 50 and 52, by the two last named artists, come as near to perfection in style as could be wished for. The author's aim is the representation of facts in building in an attractive form and he does not fail to teach the constructive basis of the art—its three dimensional aspect—and its dependence on right expression in material being clearly indicated in the medium chosen. No reference is made, in this volume, to the importance of figure drawing as an aid to the architect—to the necessity for study of decorative ornament, in detail, if its more general effects in relation to buildings are to be suitably rendered—or to principles of composition, the lack of an adequate understanding of which so often causes an otherwise excellent sketch to fail. The claims of a reserved application of colour washes or chalk—to pencil sketches might also have been considered, in view of their effectiveness and value in reducing labour. For there seems no adequate reason for a too rigid adhesion to one medium.

Nor is the great value of sketching as a stimulus of imagination in design referred to—a side of an architect's work the importance of which can hardly be exaggerated. The light inventive suggestions for buildings, as well as records of those existing, by such men as Bramante, Peruzzi and Bernini, are among the most interesting and delightful things to be found in the libraries and museums of Europe. In their more extravagant expression they lead to the phantasies of Piranesi, da Bibiena, Panini, Mauro Tebaldi and others—and the phantasy is, in its character, essentially a sketch. But Mr. Salwey would doubtless contend with a reason that could not be fairly disputed—that the omissions are outside the scope of what professes to be only a modest work of guidance to the outdoor draughtsman. To the latter, at least, this sound and useful guide to drawing in lead pencil can be confidently recommended. And if, as we hope, another edition is one day called for, its author may find it not impossible, perhaps, to so expand its scope as to embrace more comprehensively the implications of its title, and thereby enhance the value of what is, for its size and price, an admirable treatment of a subject of much importance to architects.

F. R. HIGGINS [F.].



NEW CHAPTERS IN GREEK ART. By Percy Gardner, D.Litt., F.B.A. 80. [Clarendon Press]. 1926. Though this book barely mentions architecture from art to finish, all things Greek are of interest to the architect, and it is with a delighted curiosity that we follow Professor Gardner's pleasant guiding about the more recently explored alleys of Greek art. We cannot resist reasoning, and we hail a statue at Oxford as one of the very few authentic works of Pheidias, and as a real portrait of the famed Aspasia. It will perhaps be a surprise, too, to many architects to find Professor Gardner so definitely saying that, little as we know of Pheidias, we know that the Parthenon sculptures are not his: that they are probably by many different hands—hands, too, of skilled masons rather than of sculptors of cult images like Pheidias. It is to the sculptors, not the sculptor, of the sculptures of the Parthenon that payments are recorded in an inscription which probably dates from after Pheidias' imprisonment.

Professor Gardner is particularly illuminating on the symbolic figures used to represent Greek cities, and their multitudinous successors in Roman days. Wickhoff's aims for the originality of Roman art are soundly pronounced: all the best pieces of work of Roman date are found to be by artists of Hellenistic culture, West or East—even the naturalistic carving of the Ara Pacis is paralleled by the pastoral poetry of Theocritus.

The last Essay is on the scenery of the Greek stage and full of interest, vivid in comparisons with Shakespearian settings. He describes the actor, masked, almost motionless in his high buskins; his height increased by pyramids of hair; his bulk and impressiveness by long trailing ornaments: the stage—first a low wooden stage (for he will not allow the theory that there was none)—gradually made higher and more solid: the background, first a painted plane front, later petrified into the stone proscenium of the Roman theatres—a change of scene merely indicated by prism-shaped periacti, with different symbols on their different faces—a goat to show a mountain, a dolphin and wavy lines to represent the sea. Sometimes decorations were put on the doors to differentiate one play from another: but this is the limit of change. Happenings in different place are shown simply enough: a small platform on wheels is trundled on to the stage, carrying gods or corpses. Shakespeare's "wall" and "moonshine" are elaborate distractions compared with the simple companionships of that superb drama which rolled itself out hour after hour in the hillside theatres of the Greeks.

H. C. HUGHES [A.].

ITALIAN GARDENS OF THE RENAISSANCE. By Shepherd and Jellicoe. [Ernest Benn, Ltd.] fo. Lond., 1925.

Writing on gardens has, like sketching in Venice, been done so well already that further effort in that direction must, if it is to justify itself, be either better or different. This book, being possibly better than, and certainly different from, its predecessors, establishes itself as the last word to be said on a popular subject. It has the two notable merits of comprehensiveness and accuracy, no region having been left unexplored or data accepted at second hand, so that one may be fairly certain that the samples shown and discussed are the principal gardens of Italy and are like this. The book is an authentic contribution to knowledge. As its subject dictates, the illustrations form its essence, and these, consisting of rendered

plans and sections supplemented by line bird's-eyes and by photographs, are in quality and arrangement admirable. The fine text, in the main descriptive, touches each garden in turn in its imaginative flight. I. M. C.

## The Library

NOTES BY MEMBERS OF THE LITERATURE COMMITTEE ON RECENT ACQUISITIONS.

[These Notes are published without prejudice to a further and more detailed criticism.]

ROMANESQUE ARCHITECTURE IN ITALY. By Corrado Ricci. With 350 illustrations. 40. Lond., 1925. 40s. [W. Heinemann, Ltd.]

There have been many books written and illustrated upon Romanesque Architecture, but this is the first which has given me a clear distinction between this particular style and Byzantine art of the same period—in fact, nothing in any of the illustrations can be properly called Byzantine.

The letterpress is generously filled with plans and sections; these are peculiarly western as compared with those illustrated in *Early Christian Art*, by O. M. Dalton. The press itself is more historical than architectural, but it decisively shows a clear demarcation between the two styles.

Going over the illustrations it will be seen how original, decoratively complete and suitable are the details to each complete mass. Much of the sculpture is absolutely charming without that archaic quaintness which is generally associated with this period of decoration.

The brickwork is consistently plain except in a few instances where it is patterned, but not moulded, and is a foil to the marble string courses, arcades, porches, doorways, etc.

In the latter, economy of material is always studied, for generally surface ornament in separate planes is the rule, not deeply cut away cornices and coves; it is wonderful how these separate surfaces can be pieced together to make such beautiful objects as the Canopy to the main Altar of St. Nicola at Bari, the main portal of SS. Nicolo e Cataldo at Lecce, and the façade of the Cathedral of Pisa.

A. E. H.

CHOIX DE GRANDES COMPOSITIONS EXÉCUTÉES. By G. Gromort. Deuxième Edition. fo. Paris, 1925. 18s. [A. Vincent et Cie.]

In these democratic days one studies this fine volume with a sigh—no more grand compositions, it seems, are possible for us; autocratic government and unlimited means are necessary for their production.

And yet autocracy had not always a free hand, the plans of the Acropolis, the Roman Forum and even of Versailles show the limitations imposed by the sites and by existing roads and buildings, and are the more valuable for our study on that account.

The baths of Caracalla, that ideal classic plan, and the Escorial alone are instances of uncontrolled opportunity, unless we include Piranesi's plan of the Campus Martius, which is in the main pure fantasy.

This print, beautifully reproduced, purports to represent a fragment of the famous marble plan of ancient Rome and is dedicated to Robert Adam. Piranesi in its composition had as guides only the scanty ruins visible in his day and the references in the ancient texts, and the result has never been surpassed as an exercise in ideal planning.

The Escorial is perhaps the finest example of a Renaissance plan existing, and the absence of a scale to this plate is unfortunate—the sombre and magnificent building is an excellent indication of the character of Philip II, its creator, just as Versailles is of that of Louis XIV. It would be too much to expect any Frenchman to look to England for examples of planning on the grand scale, but surely Hampton Court or Blenheim are at least as worthy of inclusion in such a work as Potsdam.

C. E. S.

SICILIA. By Karl Gröber. 4°. Augsburg. 1924. 14s. [Dr. Benno Filser & Co., Buch-und Kunstverlag. G.B.H. Augsburg.]

A series of very beautiful photographs. The book contains many new photographs of important sites, shows architecture related to its proper setting and gives an impressive panorama of the natural and architectural beauties of Sicily.

H. C. B.

HAMBURGER STAATSBAUTEN. By Fritz Schumacher. Vol. 2. 4°. Berlin. 1921. £1 10s. [Der Zirkel-Architektur-Verlag, G.M.B.H.]

This is a book on modern German architecture, and is very fully illustrated from examples chosen with quite exceptional discrimination and taste. The brickwork is excellent, and of the interiors it can be said that they are fresh without eccentricity. Schools of Architecture should find this a useful addition to their libraries.

B. O.

L'ARCHITETTURA DEL QUATTROCENTO. A. Venturi. Parte seconda. la 8° Milan. 1924. £1. [Ulrico Hoepli. Milan.]

This is the 8th volume of the author's monumental *Storia dell' Arte Italiana* and is illustrated with 744 photographs of buildings of this most interesting transitional period. Two preliminary chapters are devoted to the Gothic tradition in the south and north, and the others to the architecture of the Early Renaissance in Emilia, Venetia and Lombardy respectively. The book is provided with efficient indices.

LES ANCIENS CHATEAUX DE FRANCE. L'Ile-de-France. 8ème série, par H. Soulange-Bodin. fo. Paris. 1925. £1.

LES VIEUX HOTELS DE PARIS. Le Faubourg Saint Germain. Tome VI. 16ème série. J. Vacquier. fo. Paris. 1924. £1 8s.

LE STYLE EMPIRE, SERIES 1, 2, par J. Vacquier. Série 3 par Paul Marmottan. fo. Paris. 1920-25. £3. [Paris. F. Contet, 9 Rue de Bagneux.]

These three books are produced with the thoroughness and luxury we are accustomed to expect from French publishers. The two first have already been noticed in the JOURNAL and do not call for further comment, but attention may be called to the Château de Suisnes, an example of an older building remodelled in the eighteenth century, which will be new to most of us—the plan in particular is most remarkable.

*Le Style Empire* is *sui generis*, but the examples given will suggest motifs which may well be useful in present-day London.

C. E. S.

CHOIX DE CINQUANTE DESSINS DE MICHEL-ANGELO. 4°. Paris. 1923. £1 1s. [Braun et Cie. Paris-Dornach-New York-London.]

This can certainly be taken as an authoritative discourse on the decorations of the Sistine Chapel, especially with regard to those by Michael Angelo.

A very beautiful selection of the principal subjects is illustrated, including a good general view showing the Last Judgment and several of his marvellously characterful heads, a little over half full size.

A. E. H.

KUNSTLER UND WERKSTALL DER SPÄGOTHIC. By Hans Huth.

This is, for those who can read German, a very interesting book, for it deals with the position of the craftsmen and the Guilds in the late Middle Ages.

The pen studies of and for triptyches and reredoses are interesting, for they show the care taken in composition and the balance of parts in preference to a multitude of repeating details.

The figures introduced are always integral parts of the designs, as can be understood by referring to plate 23, where the draperies continue the flow of the traceries.

A. E. H.

ACADEMY ARCHITECTURE AND ARCHITECTURAL REVIEW. Vol. 57. 1926.

This is a useful little book of reproductions of contemporary work, and will be interesting for future reference if and when the present transition stage has evolved into a new style of architecture.

The title is misleading, since about four-fifths of the work is not "Academy Architecture"; a more truly descriptive title would be: "An Architectural Review, including some Academy Architecture"; or, to reverse the title and subtitle. This does not, however, detract from the interest of the book to those who are not deceived by the title.

J. E. Y.

## THE SHAKESPEARE MEMORIAL THEATRE

Since the Memorial Theatre at Stratford-upon-Avon was burnt down on the 6th March, an appeal for funds for the building of a new Memorial Theatre at Stratford has been made in a letter published in the press, signed by the Prime Minister, Mr. J. Ramsay MacDonald, Lord Oxford, and Mr. Thomas Hardy.

The following have consented to act as an advisory council to the Governors of the Memorial Theatre: Mr. Charles Holmes, Director of the National Gallery; Mr. Guy Dawber, P.R.I.B.A.; Mr. Reginald McKenna; Mr. James Barrie, and Mr. H. Granville Barker.

Since the inauguration of the fund, donations have been sent from all parts of the world, but the amount subscribed since the fire—£22,000—seems, in view of the universal importance of the memorial, a wholly inadequate response, even in so short a time, and not representative of the sum ultimately to be dedicated to the building of the theatre.

Donations should be paid in to the account of the Shakespeare Memorial Theatre, Midland Bank, Stratford-upon-Avon.

## BODIAM CASTLE.

A portfolio of drawings of Bodiam Castle, Sussex, has been presented to the library by Harold Sands, Esq., F.S.A. The plates it contains—which are of double elephant size—are founded principally on measurements and drawings made by the late J. Tarvenor Perry in 1864 and are now in the museum library at South Kensington. The originals consist of plans, sections and elevations drawn to the scale of 8 feet to the inch, a great number of details of doorways, windows, mouldings, etc., drawn to a larger scale, and a perspective. In the collection presented to the library the perspective has been redrawn entirely, many of the plates have been rearranged in order to secure greater clarity, and a drawing of the south-east tower has been added. It is hoped by the donor that the unrestricted use of these plates thus secured by the Institute will be of value to students and others.

Messrs. Batsford announce the forthcoming publication of a new quarterly Magazine, entitled *Old Master Drawings*, to be edited by K. T. Parker, assisted by an executive comprising Mr. Campbell Dodgson, Mr. Paul Oppé, Mr. Arthur M. Hind and Mr. A. G. B. Russett, and a Consultative Committee, including the names of many distinguished foreign art authorities. The annual subscription will be a guinea.



# Discussion on the Annual Report

92ND ANNUAL GENERAL MEETING, 3 MAY 1926.

MR. ARTHUR KEEN (VICE-PRESIDENT) IN THE CHAIR.

Mr. WILLIAM WOODWARD [F.]: I shall bear in mind, Mr. Chairman, the kindly-meant suggestion that may be as brief as possible in my remarks. I think it is the 32nd year that I have discussed the Institute's annual Report, and I wish the meeting to remember that the opinions I shall express to-night are those engendered in mid-Victorian days and they may not be appreciated by some of the younger men. I remember the men and their works of those times, amongst others Sydney Smirke, Sir James Pennethorne, Sir George Gilbert Scott, C. R.ockerell, Philip Hardwicke, William Burges, and George Edmund Street.

I have made a general *résumé* of the Report, and I have arrived at the conclusion that we are far too much in the way of procrastination, and far too much in the way of dilettantism. In my opinion, we could dispense with three-fourths of the committees, not only of the standing committees, but of all the committees, committees who now sit year after year, many of them dispensing what they consider—and rightly consider from their points of view—matters for the benefit of the Royal Institute, but there is not sufficient action.

With regard to the obituary, I am sorry to find that we have lost our past-President, Mr. Leonard Stokes, a man whom many of us knew, who was full of humour, good nature and generosity. In addition, we have lost 8 honorary members, 23 Fellows, 15 retired members, and 1 Licentiate. Assessors have been nominated by the President on 14 occasions, and 32 have been appointed the position of arbitrators. I have gone through the various attendances of the committees and I have no doubt there are good reasons why members appointed to committees are unable to attend their meetings; some are only *ex-officio* members. The result is that if you look through the attendances on the various committees you will see many which are known in cricket parlance as "duck's eggs."

On page 360 we see we have 156 additional Fellows, 1 Associates, 246 Licentiate. The Report of the Board of Education shows that an enormous amount of work has been done. Whether it gives practical education to the coming architect, I do not know, but I think you will agree that the members who attended and contributed to that work deserve our warmest thanks. One important report is that of the Art Standing Committee. It says: "With reference to the treatment of old buildings, the committee are receiving the assistance of the Society for the Protection of Ancient Buildings in the work of revision." What assistance they will get from that Society I do not know; I think, very little, but that is only my opinion. I should like this Institute to consider what the Office of Works is doing with reference to our abbeys and churches; and as to the alleged destructive effects of ivy, I have spent hours in trying to discover in what way ivy is injurious to walls, and I have arrived at the conclusion that not only is it not injurious, but that the

tearing away of the ivy by the Office of Works does considerably more harm than allowing the ivy to grow. With regard to St. Paul's Cathedral, last year I made the following observations; you will find them on page 431 of last year's JOURNAL: "I am sure that every one will agree with me that the *Times* newspaper is to be heartily congratulated on its magnificent efforts by which St. Paul's Dean and Chapter have obtained a quarter of a million of money. I have been trying for three years past to find out what is the matter with St. Paul's. I have visited it from top to bottom several times, and I have asked to be told where to put my hand on a particular part where there is a defect. I say, and I challenge contradiction, that St. Paul's Cathedral to-day is as safe, structurally, as it was when Sir Christopher Wren left it." Since then, by the courtesy of the Reparation Board, I was afforded at the latter part of 1925 an opportunity of being shown over the building by Mr. Mervyn Macartney (the architect to the Dean and Chapter), and most courteously he and his assistants not only took me over the Cathedral from crypt to dome, but answered all the questions which I had specifically written down with reference to my views on the structure. The result of that visit, and others I had made, I embodied in two brochures, one dated 9 January 1926, the other dated 27 January 1926; and I forwarded a copy of each of those brochures to the *Times*, to the Dean, to Canon Alexander, and to Mr. Macartney. I concluded with these words: "I can only now reiterate my opinion that a great blunder has been committed, and the courageous and fair way to meet that would be to admit that the work required to be done is not so serious as was at first anticipated; that, therefore, the remainder of the fund should be expended in the thorough cleaning down and making good of the whole of the interior and parts of the exterior stone work, including the sculpture, and that the unsatisfactory mosaics in the cupola should be substituted by bright and beautiful mosaic work; that all the scaffolding and hoardings should be cleared away, and that the whole Cathedral should be opened for Thanksgiving Service on Easter Day, 4 April 1926." If you will take the trouble to go from the crypt to the dome and look at the Cathedral stone by stone, and watch the squirting of cement grout, you will arrive at a very different opinion from that which you appear to have to-night. With reference to the House of Commons stone work, I must refer again to the Office of Works; and allow me to say this: I do not know a single architect of the Office of Works, so it is not a personal matter. The stone work is going to decay, and I wrote to the Secretary of this Institute with reference to a statement made by Sir Frank Baines before the House of Commons on 2 December 1925, which runs as follows: "Whether it is essential that we should reproduce it"—that is, the decoration in the building—"in exact replica in every case; would not we be a little harsh in regard to certain details?" In view of the fact that the House of Commons will not spend a farthing on anything except

their own views, I thought Sir Frank Baines might have the idea of giving us cast iron crockets and pinnacles. I wrote to the Secretary of the Institute, and this is the reply I got from Mr. MacAlister, dated 31 March 1926: "Nothing will be done in connection with the reproduction of the decoration of the Houses of Parliament by His Majesty's Office of Works until the advice of the Royal Fine Art Commission has been obtained." That is, so far, satisfactory. I now feel certain that we shall not see cast iron crockets. On page 373 there is a reference to the Library. I should like to know whether or not anything has been done with the view of protecting our books from the risk of fire. So far as I can judge, nothing whatever has been done, but perhaps we may be told to-night. Any loss would now be greater because of the excellent additions which have been made to the Library. The Report is rather satisfactory: "Readers in the reference library 7,664," and although it is 431 less than last year, you will agree with me that seven thousand is a very substantial number of readers in the reference library. Loan of books 6,930, 2,321 more than last year. I think you will agree with me that the existence of the Library of the R.I.B.A. is fully justified and that it is doing excellent work. On page 364 is the question of re-housing the Royal Institute in suitable premises that is "engaging the attention of a strong committee." Whether that strength is physical or mental I do not know; nor why "strong" should have been inserted in reference to this committee and to no other. Then we come to finance, on page 383, and the report of the honorary auditors. I was an honorary auditor myself years ago, and I got into trouble with the then Council, a very different Council from the present one. I think this Report is a very good and excellent one, and it is the result of real work. To-night we are presented with a deficit of £691, and in the Report the honorary auditors have very properly told you how the deficit arises. The total expenditure in 1925 was £25,277, and the estimated expenditure for 1926 is £30,113, an excess of £4,836, but we shall now have all the new subscriptions coming in from the amalgamation with the Society of Architects. Look at page 388. Last year they spent £1,000 on the premises; this will have to be accounted for. They have spent £500 more on conferences and general meetings, and they have got to explain that. They have spent £600 more on examinations and prizes, and £1,500 more on contributions to allied societies. But look, a little lower down, at the savings! The savings are as much as £600 on non-recurring sums. We shall perhaps be told what those non-recurring sums are.

I come to a very pleasant part of my duty. First I must deal with the President and the Honorary Secretary. In Mr. Guy Dawber's first year we have had a very pleasant time and have formed an excellent idea of him, and I think at the end of the year we shall consider him as being one of our most successful Presidents, and I am sure we shall be satisfied with the work of Mr. Stanley Hall.

And that is the end of my sermon. I am very glad you have listened so attentively to it. It is a big document to get through. I believe that when we get into working order, in two or three years, the Royal Institute will attain

that dignity and that position in the world which it richly deserves.

Mr. Woodward then referred to the length of service of the senior members of the staff and said many kind things about the Secretary and its various members.

Mr. H. P. BURKE DOWNING [F.]: Before dealing as Vice-Chairman of the Art Committee, with one or two matters arising out of the Report of that Committee I should like to express the hearty congratulations of myself and of all my fellow members on that committee in which I am sure the whole meeting will sincerely join, to our Chairman, Mr. Walter Tapper, on his election as an Associate of the Royal Academy. Architecture could not have a more fitting representative in this distinguished body.

There are, I think, few questions for me to answer on behalf of the Art Committee. The Report speaks for itself of the rather important activities this year of the committee during the months to which it relates; it only deals with about half a year. I think members will be glad to know that the Art Committee had much to do with the successful Exhibitions, the Garden Exhibition and others, which have been held in the Institute galleries this year. An important piece of work is the revision of the paper of instructions in relation to the Conservation of Ancient Monuments, about which Mr. Woodward seemed to feel some trepidation; but since the Report has been issued, the committee has prepared a revised draft, and has conferred thereon with the Society for the Preservation of Ancient Buildings. The draft which we have now practically adopted differs considerably from that of the Society, but it has the support, I think, as to the principles and methods which it lays down, of the Society, whose good work we are glad to recognise.

The only other subject of which I would make mention in Mr. Woodward's speech was his reference to the House of Parliament. But I understood him to say that was in the safe hands of the Fine Art Commission.

With regard to St. Paul's, I think that we can feel perfect confidence in knowing that we have on that Committee Sir Aston Webb, Mr. Macartney and Mr. Stanley Peach, and in their hands I think we can safely leave St. Paul's.

Mr. T. R. MILBURN [F.]: I would like to say a word about Mr. Woodward's address. He refers to the Abbey of Yorkshire, and I should not like it to go out that the Institute is not appreciative of the work which the Office of Works is doing to the Abbeys of Yorkshire, particularly Whitby Abbey and Bylands Abbey, both of which have been visited lately. The work of restoration there is something more than pulling down ivy from old walls. They are not restoring, they are upholding. It should not go out that we as an Institute are not honouring the work they are doing to these old buildings in Yorkshire and in Scotland.

I have listened to Mr. Woodward's remarks with the greatest interest, but I think the Institute should appreciate more fully the work of its various committees; they are not to be lightly dismissed. I am very near being one of his "duck eggs" in the matter of attendance this year but I have put in a good deal of time with the Practice Committee, and I do not know anybody who can know more of the hidden work of that committee than I do.



particularly the work of the sub-committees, whose names do not come before the Institute. We cannot speak too highly of the work of the sub-committees and the standing committees.

Mr. HORACE CUBITT [A.] : This meeting gives us an opportunity of surveying the position of the Institute, and I should like to mention certain facts in connection with the Institute which, I am afraid, we cannot say are satisfactory. We are apt to think because we have recently amalgamated with the Society and that our membership is nearly 6,000, that all is well. In my opinion, this fusion of a large number of fresh members into the Institute will not do us any good unless in the future we have a large proportion of the coming architects into our membership. I do not know, and as far as I can make out, no committee report tells me, how many members the Institute must recruit annually in order to keep its membership at its present figure of 6,000. If any of the officers or any committee can tell us that, we shall be glad to hear it. Possibly the matter has been gone into, page 370 in the Report of the Board of Education. I think that the total number of Associates who have obtained membership this year is 116, and that is the normal rate of recruiting for the Institute. It seems to me that an annual recruitment of 116 Associates is really insufficient to keep our membership up to its present figure of 6,000. I know Mr. Woodward has just said that we have too many committees. In looking through the list, it appears to me there is no committee whatever to deal with the question of the membership of the Institute. You have other committees doing work of more or less importance; you have a Registration Committee, which none of us think will plough the sands for the next thirty years. It may be thought that the committee that deals with membership is the Board of Education. So it does, but one can conceive that the Board of Education, in its capacity for education, may adversely affect recruitment to the Institute, namely, by setting the standard higher than it should be. It might be worth while for the Council to consider whether they should not have another committee to deal with it, if they like, the Membership Committee—to deal with it, year by year, with the question of membership. This Committee would be able to keep its finger on the pulse of the Institute, and it may be that it would act as a useful counterbalance to the zeal, which we all welcome, of the Board of Education in raising the standard of education and entrance to the Institute. We all desire a high standard of education for architects, but I suggest that that high standard is no good to architecture as a profession if half the architects entering the profession do not attain it. The policy of the Institute, twenty years ago, was to set a high standard and to keep people out who did not attain that standard. During the last twenty years there have been three instances in which the Institute has departed from that: letting Fellows in direct, and letting Licentiates on two separate occasions. This, in effect, stultified the old policy of the Institute. If we are going to have a select body of architects, with a body of unselected men outside, let us realise it, and then we can keep our examinations as they are; but if we are going to get everyone in, we should realise that unless we have a big recruitment every year of Associates, we are doing what we think we are doing. It would be worth

while—and I put it as a suggestion to the Council—to appoint a separate committee to watch over and deal with this subject.

Mr. GILBEE SCOTT [F.] : With regard to what Mr. Horace Cubitt has just said in reference to the progress of the Institute, I was glad to hear there did not appear to be a large number of likely candidates coming forward, for the profession is enormously overstocked at present. We all appreciate the work which is being done by the Architectural Association and the various schools of architecture throughout the country, who are concerned in turning out good students, but what becomes of them in the future is not their business, and apparently they do not concern themselves about it. It stands to their credit to keep their schools full. I strongly advise keeping up the standard. It seems that the only way to prevent the profession from becoming considerably overstocked, as it is at present, is to do our best to press forward registration, and then only let in those who are really competent.

Mr. H. C. BRADSHAW [A.] : In the absence of the Chairman, may I explain that the Board of Architectural Education have recently set up a Board of Moderators whose duty it is to watch the standard of the Institute examinations and to compare the number of candidates who pass at each examination with the number normally admitted? That is the special duty of the Moderators, and in doing it they confer with the Examiners. The Institute are well aware of the danger to which Mr. Cubitt has referred, and their Board of Architectural Education have taken steps to see that the matter shall not be overlooked.

Mr. PERCY L. MARKS [L.] : I think there is one point which might be made clear in reference to Mr. Woodward's remarks. He said if members present had had the opportunity which he had had of viewing St. Paul's from crypt to roof they would have seen that money had been wastefully expended in the so-called reparations. I had the opportunity which he said it was so desirable we should have. I was a member of the St. Paul's Watch during the War, and we were able to see over the Cathedral from crypt to dome, and we could appreciate the vast extent of the damage which had accrued, necessitating the immediate application of repairs in order to prevent what might have been disaster in the not too distant future. I suppose the fact is that so much had been done in the matter of repairs that Mr. Woodward, on being shown over, was not able to see the need so strongly.

Major HARRY BARNES [F.] : I should like to say a word, not so much about finance, because Mr. Woodward has assured us that in that respect all is well, but upon the very important point which has been raised by Mr. Cubitt. If we were to put what our desire is almost into a phrase, it would be that when men talk about the profession of architecture and the Royal Institute of British Architects, they should be talking about one and the same thing; and that is not the position to-day. We have got some six thousand practising architects inside the Institute. What the number of men who are practising architecture is in the country, I do not know; I think probably there are some figures in the possession of the Institute which would throw light on that point, as also on the other point which Mr. Cubitt raised as to the number we should require to recruit annually in order to keep our present figure,

six thousand, up to strength. There is no doubt that, as times change and other things change, so the general policy of the Institute has changed, and it can be said, without any hesitation whatever, that the policy of the Institute is not now to maintain a select elected few, with the great bulk of practising architects outside, but, through one means and another, to bring at some time—and the sooner the better—the whole number of architects practising the profession within its membership. We are trying to do that in two ways, and anybody who looks at the structure of the Institute as it is shaping itself will see that there are developing what I hope to see more prominently shown as time passes, two great sides; one represented by the Board of Education, whose work is set out at large in this voluminous Report, and the importance of whose work cannot be too highly estimated, and the work which is beginning to be done by the Registration Committee, which some of us hope will develop into a Board of Registration, charged by the Legislature of this country with the admission of men into the architectural profession. That is a very great policy, and one does not need to extend it outside the compass of these Isles to realise how great it is, though the policy of the Institute embraces even more than Great Britain, and beyond our Allied Societies we have the great Colonial Associations of Architects who are linked up with us. This policy does involve us in a very great task, in a task which, like all great tasks, is beset with some perils, and I think it is clear that the work to which the Board of Architectural Education is addressing itself is a task not without some peril to the Institute. What that Board is doing you know. It is composed of men who are not members of this Institute, of men who are engaged in the teaching of architecture in the great Universities, as well as men who are practising architecture as members of the Institute. I have sometimes felt that there is the danger that men getting their degrees in the Universities may come to think that those degrees are sufficient in themselves, and that it is not necessary to add the membership of this Institute. I think the Board of Architectural Education will have to watch that peril, and see that they do not give any countenance to a belief of that kind. I hope, in some way, they will ensure that students of architecture who receive the support of the Institute in the various schools affiliated to the Universities of this country are made to feel that their task is not completed by acquiring a degree in the University in which they are studying, that their work is not consummated until they have arrived at full membership of this Institute. On the other hand, the Registration Committee is at work, and while to our task has been given a generous length of time by Mr. Cubitt—thirty years—I think neither Mr. Butler nor I have that expectation of life, and we hope to see our task completed within that period. Yet he and I and Mr. Scott, and others doing this work, realise that we are on a big thing. The Bill itself is in the hands of the Parliamentary Draftsmen, and before long it will be presented to the Institute for consideration. But the Bill is only the beginning. We know that the practice of architecture has got such boundary lines that we are in contact—and it may be in conflict—with other societies who are interested in constructional work: the Surveyors' Institution, the Institution of Civil Engineers, and others; and we have to

find some means of bringing them into agreement with ourselves and our purpose. I am not without hope we shall be able to do something in that direction when we have achieved that we shall have gone a long way in the direction we are looking, to get into a position which will enable us to put a convincing case to Parliament that registration is desirable. But, outside the work we are doing with other institutions, I think we have a great work to do inside our own ranks, and inside the area which is entirely ours to cover. I mean, we have to complete the task of setting up Allied Societies throughout the country. At present we have a powerful system of Allied Societies covering nearly the whole of Great Britain, but not the whole, for we are leaving out a very important part of the whole. London is not included in any Allied Society, and there are a number of what are called the Home Counties with no Allied Society, such as Kent, Surrey, Sussex, and Essex. That is going to be a very great weakness in proceeding with a scheme for registration, for the reason is: An Allied Society is a double source of strength to the Institute. First of all, it is a source of strength in that it brings the provincial members of the Institute into close touch with the headquarters here in London. I am not sure it is the most important source of strength, but I am not sure an even greater one is not this: the Allied Society is the means by which the Institute is enabled to make a liaison between those practising architects who are members of the Institute and those practising architects who are not members of the Institute. In the provincial Allied Societies you have a great number of men—their number is growing less, and I hope it will become still less—who are not yet members of the Institute. Those non-members, when we come to press a registration scheme, are much less likely to oppose us, and more likely to give us support than are non-members of the Institute who are not even members of an Allied Society. We shall be able to carry registration in the provinces much more easily because we have our Allied Societies containing non-members of the Institute. In London we shall be able to carry it in London and the immediate counties around London where there are no Allied Societies. Therefore I take the opportunity afforded by this general meeting to place on record that one of the things we shall have to take, arising out of the registration problem, will be to explore the possibilities of complete organisation of the whole of this country on the basis of the Allied Societies. I feel sure that on the one hand the Board of Architectural Education is able to convince the public of this country that we, in the Institute here, are concerned with architecture as architecture, and are endeavouring to establish and maintain the great tradition of architecture in this country, irrespective of the interests of practising architects. I am sure that if the Board are able to do that on the one hand, and that if we on the other side, working at this registration business together with the Allied Societies, are able to complete the organisation of Allied Societies throughout the country and so get into closer touch with the non-members of the Institute, that these two sides of the Institute's work are pushed forward in a wise and statesmanlike way, we need have no doubt as to what will be the future of the Institute, and we can look forward in the future to a greater accessibility



length even than has taken place during these last

Major H. C. CORLETTE [F.]: May I say a word or two on two points which may have some practical bearing? Major Barnes referred to the Dominions. We have, later on, an Exhibition of Dominion and Imperial work here, and I would remind you that two years ago Australia asked for an Exhibition of English work in Australia. I hope that request will not be forgotten, because Australian architects would very much like seeing some of the modern and old work in England. I add a word of congratulation to the Board of Architectural Education on the work they are doing? Whether they are doing it rightly or wrongly in fostering so much of work or helping too many men to come into the Institute, I cannot say, but I understand they are doing one thing which will be much appreciated in the Dominions, namely, making an attempt to extend our prizes and scholarships to the Dominions, so that men, in their schools, or places where they have no schools, may compete for the same prizes that we give here. We are developing a Maintenance Scholarship scheme in this country. We are giving about six scholarships this year, and I should like to make a suggestion to the Council and the Board of Architectural Education that they should do what they can to extend to the Dominions the facilities for these scholarships.

There is another point. We have many committees, and they are doing most important work, but they are absorbing the work of the Library to a large extent. I suppose it means we want new premises; but if we could do anything to enable the work of the Library to be carried on with less disturbance, it would be a great thing, and would prevent the quality of the work being interfered with.

I do not see any reference in the Report to the JOURNAL, and it is my opinion, and the opinion of many outside the Institute, that it is one of the most important, if not the most important, of the architectural journals of the world. I think that in future reports we might have some reference to it. In it some extraordinarily valuable papers have appeared from year to year. A year or two ago a member of the Institute wrote when I was Chairman of the Literature Standing Committee suggesting that all his papers might be reprinted from time to time. We considered it. I think it is such an important suggestion, and might be of such great value to the members, that the matter might well receive further consideration.

Mr. J. E. FRANCK [F.]: I should like to emphasise one point in the Science Standing Committee's Report, namely, that in the Library is a list, or an information bureau, which has been supplied by the Department of Scientific Building Research. In that bureau is a short list of all the work that has been carried out on any architectural problem in every civilised country in the world, and if you go there and look it up and you want further information on any matter, you have only to note the number placed against that short synopsis and send it to Mr. Stradling, and you can have a full report of everything that has been done in the matter of research work on that problem, ranging from the destructive work of beetles to the results of earthquakes.

There is another point, which I would bring to Mr. Woodward's notice, while thanking him for his excellent letter to *The Times* on the Houses of Parliament. He speaks of cast-iron crockets. I understand the Office of Works are going to do almost as bad a thing, and that is to replace much of the stonework with Forest of Dean stone.

The CHAIRMAN: I shall not review everything which has been said on the Report, but there are one or two observations I would like to make.

I was very glad Mr. Burke Downing made reference to Mr. Walter Tapper, who has been Chairman of the Art Standing Committee for some time. I will not say I was expecting he would be admitted to the Academy, but when he was elected to it I was able to write to him and tell him, honestly and sincerely, that, thinking about the matter, I could think of nobody to whom such an honour as admission to the Academy might more properly come than to himself; and I congratulate him most cordially on the honour which has been accorded to him.

Mr. Milburn made some reference to the Yorkshire Abbeys. I have had my share in passing criticism on the Office of Works when I thought they were going beyond reason, but as regards what they have done in looking after our ancient abbeys, I have nothing but praise for them. I had the opportunity, last year, of seeing the work done at Whitby Abbey, and I could only admire extremely the valuable, careful and capable work which was being done there, and I have seen the same thing in some of the abbeys in Scotland and in other places in England, and I am satisfied that these ancient buildings are in good hands in being entrusted to his Majesty's Office of Works.

Mr. Cubitt made some useful remarks about the question of the maintenance of the numbers of the Institute. In that connection it must not be forgotten that while we have only about 6,000 members of the Institute, we are in touch with very many more who are not actually our members, but they are members of the Allied Societies, and through our Allied Societies we are in intimate touch, Mr. MacAlister tells me, with approximately 3,000 more. Many of them are in the Dominions. But in one way and another we are in active touch with many architects beyond those who are our members. The question of maintaining the numbers is one which is engaging the attention of the Board of Architectural Education.

I was extremely interested in what Mr. Franck told us about the Index which is kept on the subject of most matters of scientific research, and the ease with which people can get information on the subjects by applying at the Library. The same thing might be applied in other directions besides scientific matters, on which information might be of the greatest value to members.

The matters Major Corlette called attention to are well worthy of attention: an Australian Exhibition, if it can be brought about, and maintenance scholarships. We are getting these latter going, and they should be very valuable to students.

I have only to put to you now the resolution.

Carried.

A vote of thanks was then passed to the honorary auditors, Mr. A. Harold Goslett and Mr. F. J. Toop, who were reappointed to serve in the same office for the ensuing year.

### REGULATIONS FOR STEEL-FRAMED BUILDINGS

The Council have directed that the following report of the London Building Acts Committee of the R.I.B.A. be published in the JOURNAL for the information of members :

#### REPORT BY THE LONDON BUILDING ACTS COMMITTEE OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS WITH RESPECT TO THE CONSTRUCTION IN LONDON OF BUILDINGS WITH A SKELETON FRAMEWORK OF IRON AND STEEL.

The use of this new form of construction was first regulated by provisions in the London County Council (General Powers) Act, 1909.

These provisions are amendments of the main Building Act of London known as the London Building Act 1894.

They may apply to any alteration or addition to an old building as well as to new buildings.

The application of the Act is entirely permissive. An architect is not compelled to adopt these provisions. He may still construct his buildings in accordance with the provisions of the 1894 Act.

This latter Act controls comparatively little of the internal construction of buildings. The principal control is in respect of external and party walls. The rules for these provide for the construction of solid brick or stone walls with a diminishing section and footings, with the object that the walls shall be self-supporting. This Act also does not prevent an architect using, if he desires, stanchions, columns, girders, etc., to assist in carrying loads.

The 1909 Act, on the other hand, provides for a skeleton framework which must extend to every part of a building, and which, with the party walls, must carry the whole load of the floors, roof, etc. The walls between each floor level must be independently supported on girders.

In order to diminish the risk of a general collapse of buildings constructed in this way in the event of a fire on a lower floor, every part of the skeleton framework must be protected with an incombustible casing.

Obviously there is no necessity in this form of construction for the whole of the walls to be of diminishing thickness. The result is that the panels of brickwork between the framework often need not be more than 9 inches thick. Consequently the height of buildings in this form of construction would not be limited by the crushing strength of the brickwork or stonework in the lower part of the walls, but would be limited only by the strength of the metal framework. This form of construction provides the only practical method where exceptionally high buildings are concerned.

The 1909 Act demands that in the case of a new building to which an architect wishes to save the cost of 1894 Act walls every part of the building, from foundation to roof, must have metal framework. This framework with ordinary party walls, where they occur, must carry every part of the load of the structure. Brick pillars are not permitted for carrying any part of the loads.

In the case of new buildings with comparatively small frontages the cost of fire-resisting floors, stairs, etc., and complete metal framework, and incombustible casing bears no adequate relation to the small concession of a reduced thickness of external walls.

In any amendment of the 1909 Act endeavour should be made to secure the insertion of a clause giving an architect liberty to adopt the Act for any part of a new building. This is reasonable, seeing that an old building may, for instance, be refronted as a metal frame structure, nothing further need be done to the other part of the building.

It is true that the architect may apply to the London County Council in the matter, but it is just one of those cases which should be definitely allowed by legislation.

Careful consideration has been given to the details of the 1909 Act, and the opinions of eminent practising engineers have been obtained by various members. From these it is seen that there is a very general view that these details are too stringent, tend to unnecessary expense, and should be amended.

The following are the Committee's conclusions :

(1) That the 1909 Act should be so amended that the erection of a new building any unit may be constructed in accordance with that Act, with due regard to support and the prevention of fire, although other parts of the building are erected under the 1894 Act.

(2) That where a building is *entirely* constructed under the 1909 Act there should be further substantial reductions in view of its fire-resisting character. These should be in the following directions :—

(a) One or more storeys may be considered, subject to suitable conditions, as a separate cell for fire-resisting calculations. Automatic sprinklers should be obligatory in cases of excess cubical content.

(b) Fire escape requirements to be modified in view of the fact that the building is throughout of fire-resisting construction.

(c) Where the building is a public building constructed as a metal frame building throughout, the requirements of Sections 78 and 79 of the 1894 Act.

(3) Further detail amendments of the 1909 Act should be made as follows :—

(a) Allowance should be made for support girders and stanchions when encased with concrete.

(b) Turned bolts to be equal to rivets in shear provided the threads do not appear in the thick part of the joint bolted together. Burring over the tops of bolts should be prohibited.

(c) Panels in external walls to be allowed to follow the reinforced concrete regulations.

(d) Where shafts of columns are machined and rest directly upon basis, gusset pieces should be required except where necessary to distribute load in an adequate manner.

(e) The requirements of coating metal work should be revised. In external walls additional precautions required owing to the practical difficulty of availing of spaces behind encased stonework, etc., and the natural liability of damp penetrating from the outside to attack the metal work inside.

(f) Wind pressure to be only calculated where there is exceptional exposure, but all buildings with a height less than 20 feet high and a definite ratio of height to width.



depth to be considered to have sufficient inertia to withstand wind pressure.

(g) The working stresses in steel to be raised. A factor of safety of three instead of four to be adopted provided the steel complies with the British Engineering Association's Standards.

(h) Bearing stress in concrete in foundations to be revised, and reinforced concrete rules to be followed.

(i) Revised rules should be laid down for the bearing power of soils.

(j) The appeal from the District Surveyor's decision to be to arbitration by a single arbitrator.

(k) The definition of "Fixed, etc., ends" to stanchions to be revised, and guidance to be given for calculating eccentric loading practically on the assumption that where stanchions are continuous through several storeys the intermediate ones may be considered as fixed top and bottom. Eccentric loading to be eliminated where the girders are adequately secured in all directions to a stanchion.

(l) Super loads require to be simplified and revised. The following are suggested:—

Domestic	} 56 lb. per foot super.
Asylums	
Offices	
Shops	} 112 lb. per foot super.
Art Galleries	
Ball Rooms	

warehouses, according to user, but not less than 112 lb. per foot super.

Improvements in the manufacture of cement, including new quick setting cements, should be allowed for. In the case of brickwork we recommend 1 to 6 as the proportion for cement and sand and the allowances of loads on brickwork should be increased.

## LAW OF PROPERTY ACT, 1925.

The Council of the R.I.B.A. have directed that the following observations by Mr. J. Douglas Scott, Chairman of the Practice Standing Committee, upon the Law of Property Act, 1925, should be published in the JOURNAL for the information of members:

### LAW OF PROPERTY ACT, 1925.

The Act deals mainly with the consolidation of existing enactments relating to conveyances and other legal matters creating interests in property; the following provisions are the most important ones affecting the practice of architects and surveyors:

**Section 38. Party Structures.**—The right of partition under the old Act of Henry VIII. is repealed and replaced in a modified form whereby a tenant in common of a party wall, in case of dispute, may apply to the Courts for an order to sever it vertically as between the respective parts whilst giving them mutual rights of support over the rest of the structure. The Court may make such order as it thinks fit.

**Note.**—It is assumed that in London any such order will be subject to the London Building Act, 1894.

*Wyfair Property Co. v. Johnson, 1894.*

**Section 84. Power to Modify Restrictive Covenants.**—The power is given to "The Authority" defined as one or

more of the Official Arbitrators appointed under the Acquisition of Land (Assessment of Compensation) Act, 1919, to discharge or modify restrictive covenants affecting freehold land or the buildings thereon where, by reason of changes in the character of the property or the neighbourhood or other material circumstances, the restriction ought to be deemed obsolete or would impede the reasonable user of the land or where by the acts of omissions of those entitled to the benefit of the restriction they may have agreed expressly or by implication to the discharge or modification of the restriction. Compensation may be awarded to any person suffering loss in consequence of the order.

**Section 101. Powers of Mortgagee.**—(ii) Gives power to a mortgagee, where the mortgage is made by deed, to insure and keep insured against loss or damage by fire the property mortgaged and makes the premiums so paid a charge in addition to the mortgage money with the same priority and with interest at the same rate.

**Section 108.**—(i) Defines the amount of such fire insurance as not to exceed the amount specified in the deed or if no amount is mentioned two-thirds of the amount required to restore the property insured in the case of total loss.

(3 and 4). Provision is also made for the application of such insurance money either in making good the loss or damage or towards the discharge of the mortgage money at the option of the mortgagee.

**Note.**—Under the usual policies containing the average clause it would be necessary under (i) for the mortgagor to insure himself for the remaining one-third, and he would be well advised to insure the Architects' and Surveyors' fees in addition.

**Section 146. Restriction on and Relief Against Forfeiture of Leases.**—(1) A right of re-entry or forfeiture under any proviso in a lease for a breach of any covenant shall not be enforceable unless the lessor serves a notice on the lessee—

- (a) Specifying the particular breach, and
- (b) if capable of remedy, requiring its remedy, and
- (c) in any case requiring the lessee to make compensation.

(2) Where a lessor is proceeding to enforce such a right the lessee may apply to the Court for relief, who will decide each case on its merits.

(3) A lessor shall be entitled to recover as a debt due to him from the lessee, in addition to damages, the reasonable costs and expenses in the employment of a Solicitor and Surveyor in reference to any breach giving rise to a right of re-entry or forfeiture which at the request of the lessee is waived by the lessor.

**Section 147. Relief Against Notice to Effect Decorative Repairs.**—(1) A lessee after notice to effect decorative repairs may apply to the Court for relief and if the Court is satisfied that the notice is unreasonable, having regard to all the circumstances of the case and particularly the length of the unexpired term of the lease, it may wholly or partially relieve the lessee from liability for such repairs.

(2) But this does not apply—

- i. When the liability arises under an express

covenant to put the property in a decorative repair and it has never been done.

ii. Where the work is necessary to put and keep the property in a sanitary condition or for the maintenance or preservation of the structure.

iii. To any statutory liability to keep a house reasonably fit for human habitation.

iv. To any covenant to yield up the premises in a specified state of repair at the end of the term.

J. DOUGLAS SCOTT.

February 1926.

## Legal

BANKS v. VAILE BROS. KING'S BENCH DIVISION.  
26 APRIL 1926.

*Judgment by Mr. Justice Roche.*

His Lordship said that the plaintiff was suing for remuneration for work in connection with a scheme contemplated by defendants for development of land at Beckenham. Defendants, who were motor garage proprietors, were minded to use this corner site for erecting premises for themselves and for other purposes. It was common ground that they employed plaintiff as their architect. The scheme proceeded a long way, consent of the Council had been obtained, and certain tenders had been asked for and obtained. The defendants then found the scheme was too extensive for them, and they said they would abandon it. They did abandon it so far as the employment of the plaintiff was concerned, and what they did was to get some other architect to carry out a reduced scheme for a sum just under £3,500. The decision of the whole case turned on this point. Defendants' case was that they employed plaintiff on the terms that he should produce a scheme which should cost £3,000 and no more, and that his appointment was limited to that stipulation. The onus was on defendants to satisfy his Lordship on that point, and they had entirely failed to do so. He was satisfied that plaintiff was employed as architect, that he did a large amount of work, that the scheme was abandoned, and that where a scheme was abandoned there was a well-settled custom between building owners and architects that the ordinary charge should be two-thirds of what would be charged if the scheme had not been abandoned. It was common ground that the terms of the remuneration were 6 per cent. as an overriding and inclusive percentage. The scheme was carried out for £3,474, and upon this plaintiff was entitled to a sum of £139. He was satisfied that nothing was said at first interview between the parties as to the limit of £3,000 to which defendants intended to commit themselves or as to limiting plaintiff's employment in this manner. It was admitted that it was impossible to carry out a scheme such as was contemplated by defendants for anything like £3,000. The facts spoke for themselves, and the reduced scheme which was carried out cost £3,400. It was inconceivable that plaintiff would have consented to do any work on lines which he knew would be bound to lead to failure. The £3,000 was

mentioned as a matter of expectation when the tenders were in, and it was found how costly the matter was. The defendants were within their rights in terminating plaintiff's employment, but they cannot refuse to pay him under the two-thirds rule. The counterclaim by defendants had been abandoned, and would be dismissed. There would be judgment for plaintiff for £139 with costs.

## Architects' Benevolent Society

The seventy-fifth Annual General Meeting of the Architects' Benevolent Society was held in the room of the Royal Institute of British Architects on Tuesday 1st June, 1926, at 5 p.m. The President, Mr. E. Dawber, was in the chair. Among those who were present were: Mr. Henry Lovegrove, Mr. C. H. Brindley, Mr. E. Stanley Hall, Mr. A. H. Moberly, Mr. Albert Kingwell, Mr. Arthur Crow, Mr. C. E. Worthington, Mr. D. Ivor Lewis, Mr. William Gilbert, Mr. I. Williamson, Mr. Walter Dewes, Mr. E. B. Lamb, Mr. Hilton Nash (Honorary Treasurer), Miss E. H. M. (Secretary).

In the absence of the Honorary Secretary, the Secretary read the Annual Report as follows:—

The Council have the pleasure to submit their seventh Annual Report. Seventy-seven applicants have been assisted with grants during the year, of whom thirty-one were architects and architects' assistants; thirty-three were orphans, and thirty-three widows. The sum of £1,525 has been expended in their relief. £507 10s. have been spent in pensions, the pension list having its complement of ten pensioners, with the addition of three pensioners who are in receipt of the Dinwiddie Annuity. Subscriptions have been received to the amount of £1,050 11s. 6d.

Donations have maintained a high level, and the Council have gratefully to record the gift of £1,000 Stock at 2½ per cent. Annuities from Mr. H. S. E. Vanderpan, the purpose of founding "The Henry L. Flor Annuity," and £525 from the Society of Architects, which on their dissolution, voted this sum to the Society so that it might not be the poorer for lack of the subscription which the Society of Architects had given annually in the past. Legacies include £100 from the late Mr. James Kenyon, and £20 in respect of the last instalment of Mr. Raggett's legacy of £100.

Among the larger donations may be mentioned £67 os. 5d. from Mr. Arnold Mitchell to compensate the deficit in the Society's accounts at the end of last year; £25 from Major Halsted Best; £10 10s. from Mr. W. Dewes, Mr. D. M. Franklin, and the Incorporation of Architects in Scotland; and £5 5s. from Mr. C. Brodie, Mr. C. A. Carr, the Nottingham and Derby Architectural Society, Mr. H. Goodrham, Mr. H. Nield, Mr. Digby L. Solomon, and Mr. William Wainwright.

The generosity of donors has enabled the Society to add £950 of stock to its investments in the course of the year.



The Council report that the Insurance Committee has had six meetings during the year, and that the scheme has been widely advertised among members. Many new insurances have been negotiated which, with the renewal policies already effected, have brought in a considerable sum to the Society. As, however, it is felt that more advances would ultimately result if the scheme were more actively advertised, the Council report that any delay on the scheme will be forfeited for the next few years, so that if it is found necessary, all that is received in commission may be spent in the development of the scheme. A suggestion was brought forward early in the year that the insuring of buildings in course of erection should be worked in conjunction with the Builders' Benevolent Institution, the commission to be shared by two benevolent societies, who approved the scheme. The scheme was submitted to the London Master Builders' Association, who, however, did not see their way to adopt it, and it has been allowed to lapse for the present.

The Council have the pleasure to report that Sir Edwin Lutyens has consented to act as one of the Trustees of the Society in place of the late Mr. Paul Waterhouse.

The Council have the pleasure to acknowledge their indebtedness to the Royal Institute of British Architects for the use of office accommodation, and to Mr. MacAlister and the staff of the Institute for courteous assistance on all occasions.

The President, in moving the adoption of the Annual Report and Balance Sheet, said:—

As President it gives me very great pleasure to move the adoption of the seventy-sixth Annual Report of the Society and to congratulate the Society on the satisfactory progress of the year, which opened with a deficit.

Like all charitable institutions our great need is money, and as most of our income is derived from subscriptions, it is therefore very important that they should be maintained at a high level, for although they have been steadily increasing, we are still asking for more, as the number of donors every year also becomes larger.

Last year, you will see by the report, we had something like £1,050, but considering the number of practising architects in the United Kingdom this does not seem a very great sum, and I do hope that many more will become subscribers and help to swell our income and so enable the Society to increase the scope of its beneficent activities.

This past year we have been very fortunate with donations, and we have particularly to thank Mr. H. S. E. Lerpant in connection with the Henry L. Florence Society and the Society of Architects for their donation of five Hundred Guineas.

It gives me very great pleasure to mention this, as in the negotiations connected with the winding up of the Society and the amalgamation with the Institute they have been consistently considerate and generous.

Our Insurance scheme is progressing favourably and working slowly but surely towards its end, which is to insure all the insurances of architects and by this means further the good work of the Society.

This is the first occasion on which I have had the honour of taking the chair as President of the Architects'

Benevolent Society, and I hope that if I am spared to do so, I shall a year hence find the Society in an even better financial position than it is now."

The Council for the ensuing year were elected as follows:—

*President*.—E. Guy Dawber, F.S.A., President of the Royal Institute of British Architects.

*Vice-President*.—Thomas Dinwiddy.

*Council*.—W. Henry White, Maurice E. Webb, E. C. P. Monson, Major H. C. Corlette, Edward J. Partridge, A. H. Moberly, H. D. Searles-Wood, Osborn C. Hills, Arthur Crow, G. H. Fellowes Prynne, Michael Waterhouse, L. S. Sullivan, R. Dircks, E. Stanley Hall (representing the Architectural Association), Henry Lovegrove (representing the London Society).

*Hon. Treasurer*.—W. Hilton Nash.

*Hon. Secretary*.—Sir Charles A. Nicholson, Bart., M.A.

#### THE INTERNATIONAL BUILDING TRADES' EXHIBITION.

As a result of the International Building Trades' Exhibition, which was held at Olympia in April, Mr. H. Greville Montgomery (Honorary Associate), the Director of the Exhibition, has sent a cheque for £150 through the President to the Architects' Benevolent Society.

#### SURVEYORS' INSTITUTION.

##### ELECTION OF NEW PRESIDENT.

Mr. Dendy Watney has been elected president of the Surveyors' Institution, in succession to Mr. J. D. Wallis, whose year of office terminated yesterday. His election is the fifth instance of the chair being occupied by the sons of former presidents, the others having been Sir John Hubert Oakley, Mr. A. L. Ryde, Mr. Leslie R. Vigers, and the late Mr. Howard Chatfield Clarke. Mr. Watney is senior partner of the firm of Daniel Watney and Sons. He is surveyor to the Mercers' Company, and one of the three members of the Tribunal of Appeal under the London Building Act.

#### ST. DUNSTAN'S HOSPITAL.

##### WORK OF WAR-BLINDED CRAFTSMEN.

Captain Ian Fraser, C.B.E., M.P., the Chairman of St. Dunstan's, is sending a letter to all members of the architectural profession asking architects to use their influence with their clients with a view to their placing orders for cocoa-fibre mats with St. Dunstan's. Captain Fraser points out that there are nearly five hundred St. Dunstan's war-blinded men engaged in making cocoa-fibre mats alone, and that it will be appreciated that St. Dunstan's needs to have a very considerable and sustained market for these goods at all times.

The whole aim and object of St. Dunstan's work since its foundation in 1915 by the late Sir Arthur Pearson has been to prove to the war-blinded men that after training he has regained his usefulness to the community and his independence of charity. It is certain that the interest in, and sympathy with, the splendid work which St. Dunstan's and its war-blinded men are doing will result in a widespread response to Captain Fraser's appeal. That "a blinded soldier busy is a blinded soldier happy" is a famous axiom of St. Dunstan's, and no doubt architects will use their influence to obtain orders for these gallant war-blinded craftsmen.

## Obituary

WILLIAM WATKINS [F.].

We regret to announce the death recently of Mr. William Watkins, of Lincoln, who was elected a Fellow in 1881 and became a Retired Fellow in 1918.

Born at Rushock, near Droitwich, in 1834, Mr. Watkins began his professional career at Worcester, where he was an articulated pupil, and went to Lincoln subsequently to enter the office of the late Mr. Goddard, the best known Lincoln architect. Mr. Watkins later, at the age of thirty, started in practice for himself.

Among his many works in Lincoln are the Lincoln Conservative Club, St. Mark's Church, the Girls' High School, the Convent School (originally the Lincoln Grammar School), and the Lincoln Dispensary. Included in his work in the restoring of old buildings may be mentioned that at St. Botolph's Church, St. Mary le Wigford, St. Nicholas Church, and especially the Lincoln High Bridge and the old houses standing on it. He also designed his own residence, Leyland House, and many other private houses.

He built the gates at Burton Hall, Willoughby Hall, near Grantham, the Grantham Town Hall, the Markets and Corn Exchange at Doncaster, the Kidderminster Workhouse and the Orphanage at Worcester amongst other structures.

For some considerable time he was architect to the Lincoln County Hospital, the operating theatre and Ruston Ward, both of which were built from his plans. He took part in the restoration of Boultham Hall and North Carlton Hall, and built the mausoleum for Lord Monson.

Mr. Watkins was a recognised authority on the history of Lincoln Cathedral, and was, in conjunction with Mr. Francis Bond, joint author of a paper published in the JOURNAL on the architecture of St. Hugh's choir, and also sole author of another lengthy paper on the architecture of Bishop Grosstête, both of which broke fresh ground in elucidating the early history of the thickened walls and added high vaults.

Mr. Watkins was a J.P. and a past-Mayor of Lincoln, and took a great interest in the public work of the city.

"Perhaps no man of his time," to quote a local paper, "has left his mark so strongly on the city of his adoption and affection. He was a real citizen."

See JOURNAL pp. 33-50, 84-97, Vol. 18, 3rd Series.

JOHN CASH [F.].

Mr. John Cash, who died on 23 April at the age of sixty-three, served his articles in Newcastle.

After gaining experience in several offices he became Assistant and Manager to the late R. Selden Wornum [F.], a post which he relinquished in 1895 when he started practice on his own account. He became a Fellow in 1901.

Among the works carried out by him are the following :

- Public Libraries at Harlesden and Beverley.
- Public Hall at Horton.
- Children's Homes and Doctor's house at Acton.
- The Catherine Gladstone Convalescent Home.
- The business premises of Messrs. Macmillan & Co., Ltd., in London and (in conjunction with Mr. M. S. Hack) in Bombay.
- Houses at Littlestone, Chesham, Binfield, &c.
- Alterations and additions to Hawarden Castle.
- Library for the late Lord Morley.

Until quite recently some of his work was usually to be seen at the Royal Academy Exhibition. He was equally facile with pencil, crayon, pen and water colour, as well as being a skilful etcher.

For many years he was a Justice of the Peace for Middlesex and took a keen interest in social work and welfare.

His practice is being carried on by his son, Mr. Herbert Cash, A.R.I.B.A.

ALEXANDER McWILLIAM [A.].

Mr. McWilliam died at the age of 35 at Edinburgh. Since commencing practice on his own account his work included alterations connected with St. Joseph's Industrial School, Tranent, Midlothian; a War memorial in the form of a Mortuary Chapel in St. Patrick's R.C. Church; and more recently, in the same building, a Lady Chapel and Sacred Heart Chapel. He also showed promise of being an expert on town planning and housing, having secured second place in the City of Edinburgh Town Planning Scheme, Saughton hall area.

### THE EXAMINATIONS.

R.I.B.A. PROBLEM IN DESIGN No. LXXXVII.

Owing to the disorganization caused by the Strike, the date for the submission of problem in Design No. LXXXVII (a) and (b) has been altered from 30 June to 17 July 1926.

REGISTRATION AS PROBATIONER R.I.B.A.

Special attention is called to the fact that, except in very special cases, a Headmaster's Certificate will not be accepted as a qualification for registration as Probationer R.I.B.A. after 1 October 1927, and no one will be registered as a Probationer unless that person has passed one of the recognised examinations in the required subject.

A list of the examinations recognised may be obtained free at the R.I.B.A.

## Notices

THE FIFTEENTH GENERAL MEETING.

The Fifteenth General Meeting (Ordinary) of the R.I.B.A. Session 1925-26 will be held on Monday, 21 June 1926, at 8 p.m., for the following purposes :—

To read the Minutes of the Fourteenth General Meeting (Business) held on 14 June 1926; formally to admit members attending for the first time since the election or transfer.

To read the following paper : "The Work of the late Sir Thomas Graham Jackson, R.A.," by Mr. H. Goodhart-Rendel [F.].

EXHIBITION OF COMPETITION DRAWINGS FOR BANK OF LIVERPOOL AND MARTINS, LTD.

An exhibition of the competition drawings for the new Head Office buildings of the Bank of Liverpool and Martins, Ltd., will be held in the R.I.B.A. Galleries.

It will be open to the public on Wednesday, 23 June, and will remain open till Saturday, 3 July, from 10 a.m. to 7 p.m. (Saturday, 5 p.m.).

R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28 Bedford Square, London, W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the Committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at the above address.



## THE INSTITUTION OF STRUCTURAL ENGINEERS.

### PORTLAND HOUSE TRAVELLING SCHOLARSHIP VALUE £300.

This scholarship is now open to Fellows, Associates and Licentiates of the Royal Institute of British Architects. The final date for entry is Monday, 14 June 1926. Particulars and form of entry can be obtained from Captain M. G. Kiddy, Secretary, Institution of Structural Engineers, Abbey House, Westminster, S.W.1.

### ADVERTISEMENT IN THE R.I.B.A. JOURNAL.

The attention of members of the R.I.B.A. is specially directed to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. An increase in the income derived from such advertisements is a help to the financial position of the R.I.B.A. and an advantage to all its members. The circulation of the JOURNAL is world-wide, and going, as it does, to more than 6,000 architects in almost every part of the Empire, its potential value as an advertising medium is unequalled.

## Competitions

### PROPOSED SAFFRON HILL CEMETERY, LEICESTER.

The Corporation of Leicester invite qualified architects to submit plans, designs, and estimates for the carrying out of the proposed New Cemetery with all necessary buildings. Assessor, Mr. H. V. Lanchester [*F.*] Prizes, £100, £50, and £25. Designs to be sent in not later than noon 12 July 1926. Particulars from the Surveyor. Deposit £1.

### OMSGROVE RURAL DISTRICT HOUSING COMPETITION.

Members of the Royal Institute of British Architects are not to take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

### URBAN IMPROVEMENT SCHEME, ABERDEEN.

The Town Council of Aberdeen invite architects to submit competitive designs for the proposed buildings to be erected at the sea beach, Aberdeen. Assessor, Mr. J. Keppie [*F.*], President of the Incorporation of Architects in Scotland. Designs to be sent in not later than 28 June 1926. Conditions may be obtained from Mr. B. Gardner, Director of Housing, Town House, Aberdeen.

### COUNCIL OFFICES AND FIRE STATION, PURLEY.

The President of the Royal Institute of British Architects has nominated Mr. P. D. Hepworth, F.R.I.B.A., as Assessor in this competition.

### SCHEME FOR BUILDING LARGE RESIDENCES, CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the

above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competition.

### MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

### LEAGUE OF NATIONS.

#### COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

### AUSTRALIAN NATIONAL WAR MEMORIAL AT VILLERS BRETONNEUX

The date for the submission of designs in the above competition has been further extended from 31 May to 31 July 1926.

### SCOTTISH LEGAL LIFE ASSURANCE SOCIETY : NEW AND ENLARGED PREMISES.

The President of the Royal Institute of British Architects has nominated Mr. John Keppie, A.R.S.A., F.R.I.B.A., as Assessor in this competition.

## Members' Column

### PARTNERSHIPS WANTED.

A.R.I.B.A., aged 31 years, desires partnership or position with view to partnership, preferably in or near London. Trained and since served as Assistant under well-known Architect; used to public and all kinds of general building.—Reply Box 8721, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.

A.R.I.B.A., aged 36 years, desires partnership, or position with a view to partnership, in London or South of England. Small capital available. Is energetic and unafraid of work. Can commence immediately.—Apply Box 1646, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

F.R.I.B.A. (41), with excellent pre-war practice in the North of England, desires to purchase a share in a well-established London firm of Architects. Full particulars will be given on application to Box 1419, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

A.R.I.B.A., aged 32, desires partnership in established practice or position with view to partnership. Studied recognised School. Reply Box 3297, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

### APPOINTMENTS VACANT.

*County Council of Durham: Education Department.*

Applications are invited for the following appointments:—

- (1) Assistant Architect. Salary, £550 per annum.
- (2) Assistant Architect. Salary, £350 per annum.
- (3) Junior Assistants, Two required. Salary, £225 per annum.

For forms of application apply, enclosing stamped addressed foolscap envelope, to the Director of Education, Shire Hall, Durham. Last day for receiving applications, Monday, 21 June 1926.

### APPOINTMENT WANTED.

A.R.I.B.A., with small practice, desires working arrangement with another Architect requiring part-time assistance and management of office during absence. Advertiser has been responsible for, and in charge of, important work, and is exceptionally experienced.—Reply Box 2514, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

### PRACTICE FOR SALE.

For quick disposal at low figure, Architects and Surveyors' Practice, in West Riding Town. Owner remaining in district and will give general supervision as required.—Reply Box 3103, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

### CHANGE OF ADDRESS.

MR. H. B. CRESWELL, F.R.I.B.A., has removed his offices from Lincoln's Inn, to 3 Plowden Buildings, Middle Temple, E.C.4. Telephone: Central 1400.

MR. JAMES M. HONEYMAN [A.], has acquired the business carried on by John B. Wilson and Son, at 92 Bath Street, Glasgow. He will continue to carry on the business together with his own at 92 Bath Street, Glasgow, under the name of John B. Wilson, Son and Honeyman. Telephone: Douglas 1972.

### ACCOMMODATION WANTED.

A.R.I.B.A., 44, with small practice, offers part time services in return for private office accommodation (West End preferred) and occasional Drawing Office and clerical assistance.—Reply Box 3448, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

### OFFICE WANTED.

ASSOCIATE offers nominal rent and part services for small Office or accommodation in West-End.—Reply Box 6262, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

### OFFICE TO LET.

ARCHITECT wishes to let furnished small Office in Old Queen Street, Westminster, with all facilities, but retaining part interest therein. Long or short period. Moderate.—Reply Box 6135, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

### OFFICE ACCOMMODATION.

A.R.I.B.A. wishes to share part of his offices well lighted, on first floor, and situated in Pall Mall district, with another architect.—Reply Box 2069, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

### ROOM TO LET.

A.R.I.B.A. has large unfurnished room to let in Bloomsbury Square. Rent, £60 per annum, cleaning and lighting extra.—Apply Box 4025, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

### LEASE OF OFFICES.

A.R.I.B.A. wishes to dispose of lease of three well-lighted offices, just off Victoria Street, Westminster. Rent, £85 per annum. Premium £50, Rates and Taxes extra.—Apply Box 6291, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.I.

### MR. FRANK S. ROBINSON.

MR. FRANK S. ROBINSON, L.R.I.B.A., has opened an office, 20 High Street, Keynsham, Somerset, and will be glad to receive manufacturers' catalogues.

### ASSISTANCE OFFERED.

ASSOCIATE, whose practice is not yet sufficiently remunerative, offers assistance to Members. Own office, 'phone, etc., very reasonable terms.—Hampton, Tonbridge, Kent.

## NATIONAL HEALTH AND PENSIONS ASSURANCE

The Architects' and Surveyors' Approved Society,  
26 Buckingham Gate, London, S.W.1.

### CONTRIBUTIONS.

The contribution for men is 1s. 6d. per week, 9d. of which is payable by the employer, and for women 1s. 1d., 7d. of which is payable by the employer.

### ORDINARY BENEFITS (HEALTH INSURANCE).

*Sickness Benefit.*—Men, after 26 contributions have been paid, 9s. weekly; after 104 contributions have been paid, 7s. weekly. Women, after 26 contributions have been paid, 7s. weekly; after 104 contributions have been paid, 12s. weekly.

*Disablement Benefit.*—Men and women, 7s. 6d. per week after 104 contributions have been paid.

*Maternity Benefit.*—40s. after 42 contributions have been paid.

### ADDITIONAL BENEFITS (HEALTH INSURANCE).

The recent valuation of the Society's assets having shown a largely increased surplus, the following scheme of additional benefits was brought into operation from 6 July 1925:

*Sickness Benefit.*—Payable at the increased rates of 22s. 6d. per week for men, and 19s. for women.

*Disablement Benefit.*—Increased to 11s. per week for both men and women.

*Maternity Benefit.*—Increased to 54s.

*Special Benefits.*—Grants made to members entitled to "additional benefits" for the full or part cost of optical, dental, hospital, nursing home or convalescent treatment, also for glass, surgical appliances, artificial teeth, etc. Members may choose their own dentists, opticians or institutions.

Forms of application for membership, also pamphlet detailing the benefits under the new Pensions Act, may be obtained from the undersigned. HERBERT M. ADAMSON, Secretary.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to the method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

### R.I.B.A. JOURNAL.

*Dates of Publication.*—1926: 26th June; 17th July; 14th August; 18th September; 16th October.



# Journal of the Royal Institute of British Architects

VOL. XXXIII. No. 16

THIRD SERIES

26 JUNE 1926

## Contents for 26 June 1926

	Page
THE WORKS OF SIR THOMAS GRAHAM JACKSON, R.A. Illustrated. By H. S. Goodhart-Rendel .. .. .	462
DISCUSSION .. .. .	477
THE PALACE OF KNOSSOS. By Theodore Fyfe .. .. .	479
REVIEWS :	
THE ARTS IN EARLY ENGLAND. By P. M. Johnston .. .. .	480
SOHO BEFORE THE HOUSES. By Gilbert H. Lovegrove .. .. .	482
WESTMINSTER ABBEY AND ITS ANCIENT ART. By Ernest A. R. Rahbula .. .. .	482
THE LIBRARY: NOTES BY MEMBERS ON RECENT ACQUISITIONS .. .. .	481
JOHN SELL COTMAN. Illustrated. By W. Hilton Nash .. .. .	483
THE BI-CENTENARY OF SIR JOHN VANBRUGH.. .. .	485
CORRESPONDENCE :	
OLD BRIDGES. By R. Langton Cole .. .. .	485
THAMES BRIDGES: ROYAL COMMISSION TO BE APPOINTED .. .. .	486
LONDON STREET ARCHITECTURE MEDAL: AWARDED TO SIR EDWIN L. LUTYENS.. .. .	486
FRANCO-BRITISH UNION OF ARCHITECTS. By H. P. L. Cart de Lafontaine .. .. .	487
ALLIED SOCIETIES:	
INCORPORATION OF ARCHITECTS IN SCOTLAND .. .. .	489
CENTRAL SCHOOL OF ARTS AND CRAFTS. By F. R. Hiorns.. .. .	490
SCALE OF CHARGES .. .. .	490
LIMITED COMPETITIONS .. .. .	491
OBITUARY :	
T. B. WHINNEY. By H. Austen Hall .. .. .	491
NOTES FROM MINUTES OF COUNCIL .. .. .	492
THE ANNUAL ELECTIONS: RESULTS .. .. .	493
COMPETITIONS .. .. .	494
MEMBERS' COLUMN .. .. .	495
MINUTES .. .. .	495-6



BRASENOSE COLLEGE, OXFORD : NEW FRONT TO HIGH STREET  
From a drawing by Sir Thomas G. Jackson, R.A.





HIGH SCHOOL FOR GIRLS, OXFORD

## The Works of Sir Thomas Graham Jackson, R.A., Royal Gold Medallist

BY H. S. GOODHART-RENDEL [F.].

[Read before the Royal Institute of British Architects, on Monday, 21 June 1926.]

IT was the fashion some years ago to base all discussion of English architecture upon the premise that English architecture was dead. The date of its death was variously reckoned; it had last been seen alive in the time of the Georges and was presumed to have passed painlessly away some time between the Peace with France and the Great Exhibition; so that Pugin might dance on its grave and Ruskin exhume it to give his disciples a lesson in anatomy. Since which it had been preserved in spirits for the use of students.

This is really no rhetorical exaggeration. Read where you will in the writings on æsthetic of the last generation, and you will never long escape an obituary notice of architecture. At this date or at that date the spirit left the body, thenceforward nothing could be expected beyond ingenious galvanisations of the corpse, cosmetic rejuvenations of its face.

While all this was being said Norman Shaw was building New Scotland Yard and Bentley was plan-

ning Westminster Cathedral. Either they had not been told that architecture was dead or they refused to believe it. Sir Thomas Jackson also was busy building, joining to his works a faith in the welfare of English architecture that he never shrank from proclaiming. "To the freedom from the bonds of strict professionalism," he said once, "the British School of Architecture is indebted for that proud position which it holds among the schools of Western Art."

The occasion on which these words were spoken gave them, perhaps, a double edge. They form part of his reply to the congratulations paid him by the President of this Institute on his reception of the Royal Gold Medal. Sir Thomas's lifelong opposition to the campaign for Registration carried on by this Institute made his nomination for the Gold Medal an event unexpected by many, and most honourable to all concerned. In receiving the distinction he may well have wished to record his unabated distrust of the "professionalism" for

which in his opinion the Institute had too often stood, but disregarding the friendly malice of the phrase we may find in its sense the expression of a heartfelt creed. Sir Thomas was an individualist, and dreaded alike the rules of guilds and the dogmas of academies. To him, true child of his century, the first necessity of art was absolute liberty.

In the present market, no doubt, Victorian liberty is depreciated, and the few traditions the Victorians did not sever are at a premium. We cannot understand why when Adam had perfected orderly planning the Puginists must innovate with disorderly planning: why when Cockerell had brought to England the independent doctrine of the French rationalists Ruskin must force architecture to become the unquestioning handmaid of Protestant morals: why when at last secular Gothic was systematised by Waterhouse and Street it was necessary to turn from it and woo Queen Anne with bric-a-brac. We cannot understand these reactions because the memory of the actions that produced them has faded away. We have been born to freedom and find it cheap and unsatisfying, we see it against no background of a broken tyranny; we see it rather as a heritage of outlawry, as the curse of the wandering Jew. We feel that we need not a Rousseau but a Mussolini.

It is, therefore, very necessary before examining the work of the generation to which Sir Thomas Jackson belonged to consider the influences amid which that work was conceived and executed. Sir Thomas was a pupil of Sir Gilbert Scott and this fact alone is of typical significance. Sir Gilbert Scott had once been chief assistant to Roberts, who was Smirke's pupil and the designer of Fishmongers Hall, and this fact is significant also. I think that Sir Thomas was often in revolt against the theories of Scott and I am sure that Scott was always in revolt against the theories of Roberts whenever—which was probably seldom—he remembered them.

If we allow Roberts to represent the neo-Classical architects, of which he was one of the last to survive: if we acknowledge, as we must, that Scott was the most generally representative architect of the Gothic Revival: and if we claim, as I believe we can, that Sir Thomas Jackson was one of the most skilful exponents of the Revival of Renaissance to which that of Gothic gave way; we can regard the working life of the three men as not only synchronising with but typifying the tendencies of

English architecture during the last century. Let us look for a moment at the standpoint represented by each.

The architectural system of the eighteenth century was framed to extract from middling capacity the highest achievement possible to it. To this end it sacrificed any talent bad or good that was notably egregious. The five orders and their combination were all that the average head could carry and therefore all that any head should be allowed to contain. Vanbrugh, Hawksmoor, Archer, and Adam all had heads that contained a good deal else, they were consequently exposed by the best judges as licentious and temerarious. Their example was dangerous; unsuccessful imitation of their peculiarities would do more harm than those peculiarities could ever do good, therefore for the common weal they must be suppressed.

The Gothic Revival replaced this tyranny by another—by that of Rickman's classification and of the laws of Ecclesiology. "Church architecture," writes the editor of *The Ecclesiologist* in 1854, "is no longer tentative. It approaches to something of the completeness of an exact science. It is admitted to be a subject not so much of taste as of facts." Of facts such as the symbolical impropriety of western triplet windows, the necessity for encaustic tiles, the obligation that no moulding, no ornament should be too "early" or too "late" for the forms with which it was combined. Of facts that were combined by Sir Gilbert Scott into one of the least uncertain systems of money-making that man has ever devised. Of facts that drove many of Sir Gilbert's pupils, and many of Street's pupils (great artist though Street was) into almost passionate rebellion.

This rebellion took the form of a revival of the two styles most abhorred by Ecclesiologists; late Gothic—pronounced by them to be corrupt—and Renaissance—christened by them "the Debased Style." To the leaders of the rebellion, Philip Webb and Norman Shaw, it brought emancipation from strict stylism—their method was eclectic to the rest it brought a change from styles become law-bound to others of which the law-givers were not yet established. Though still confined in the prison of the past, they had broken into forbidden chambers, exploring which they felt themselves free.

Art movements are called by strange names, and never did name misfit movement more oddly than



Queen Anne" the rebellion of which I have been speaking. But "Queen Anne" it was called, and it was as an apostle of a particular kind of "Queen Anne" that Sir Thomas Jackson first became known and respected by the public. In the year 1876 the foundation stone was laid at Oxford of the Schools," a building in which Sir Thomas

significant: Queen Anne then was the chosen patron of the party of youth, the protector of the rebel from Gothic, the Faerie Queene of the new Renaissance.

In so far as this movement was a renaissance of the Renaissance it is as indigestible by most of us as twice cooked meat. If Ernest George,



PIANOFORTE DESIGNED BY SIR THOMAS G. JACKSON FOR MR. ATHELSTAN RILEY

inaugurated the reproduction of Renaissance peculiarities that was to be the preponderant element in the style of nearly all the secular buildings he was afterwards to design. That the façades of the Schools, so exactly describable as "Oxford Jacobean," have as little to do with Queen Anne as have Bodley and Garner's slightly earlier school Board offices in London will be apparent to every one nowadays. That both were described as "Queen Anne" in their time is, nevertheless,

Thomas Colcutt, George Devey, and Sir Thomas Jackson's other like-minded contemporaries had achieved nothing save the elaborate reproduction of immature architectural detail that was one of their activities, if they had innovated in no way save that of deliberately contriving accidental-looking compositions, there would be little to recommend their work to the present generation for study. I think, however, that these men, strange though some of their methods may seem to

us, were true architects, masters from whom we can learn a good deal. Forget the haphazard planning they generally practised, forget the no longer admired confusion of their elevations, forget the terra-cotta they loved, forget the crowded ornament of their room decoration, and you will find plenty to respect in the individuality, the abundance and the unassuming intimacy of their conceptions; in the modest easy opportunism that, if it has been the bane of our monumental architecture, has obtained for our house-building a supremacy in Europe that is still unchallenged.

In Sir Thomas Jackson's design you will find, beside these qualities, a careful refinement upon the Renaissance models that were the source of his inspiration. Unlike Ernest George, he could not tolerate the coarseness of Low German motifs; unlike Devey, he never mimicked those motifs in their Elizabethan form. The small orders that he applied lavishly to his façades, though typically Renaissance in their arbitrary placing, are invariably graceful and pure in themselves. The sculptured foliage in which he delighted is free from the clumsiness that disfigures so much of that of the sixteenth and early seventeenth centuries. He was, as it was right that a nineteenth century architect should be, sophisticated and urbane where the English Renaissance pioneers were ignorant and rustic. His details are those of an artist who knew his Bramante and his Philibert de l'Orme.

Indeed, as a designer of ornament in the Renaissance and in the late Gothic style Sir Thomas Jackson displayed exceptional accomplishment. I think that of all the honours which were showered upon him during his prosperous career none was more appropriate than his election as master of the Art Workers' Guild. To a seeker after perfection in art a snuff box may be a greater thing than the palace of its royal owner, and it is with no fear of ridicule that I confess that of all Sir Thomas's varied works the one that has pleased me most has been the pianoforte he designed for Mr. Athelstan Riley. A pianoforte case is a difficult thing to shape well and to decorate, and the demand for a beautiful pianoforte is an opportunity in which the greatest artist and the greatest craftsman should rejoice. Mr. Riley's Broadwood seems to me almost perfect in appearance, and its appearance is essentially the outcome of its nature and use. Generally when an artist is called in to

improve the design of an object hitherto shaped by its manufacturer unaided, his first operation is to alter its traditional form into something extremely inconvenient. I can recall two pianofortes designed by eminent architects one of which aspired to be a gate-legged table and the other of which looked like a cistern supported on a bier. The outline of the beautiful instrument designed by Sir Thomas will be seen to be very little different from the outline of the pianoforte of tradition, a tradition that if not enlightened by art has at any rate been formed by practical experience. But this traditional outline has been infused with an elegance which fits it to embrace the lovely ornament spread in such profusion over the body. As is proper, the inside, being nearer to the music, is more splendid than the outside; outside the pattern is of sober coloured marqueterie, inside of gold gesso or scarlet paint.

Flat patterning of this kind was so dear to Sir Thomas that he was not content to apply it to furniture only, but tried once or twice to make it an ingredient of the actual architecture of his buildings. The Town Hall of Tipperary was designed to display on its exterior sgraffito decorations of a scale equal to that of the wall paintings to be found on some German houses. I have not seen this building but should judge from drawings that the experiment tried in it was successful. Sgraffito appears again inside his churches, notably at Hornblotton, and is combined with other rich adornments in the chapel of Giggleswick School. Of these buildings I shall have something to say later on.

The richest decoration that I know in any work of Sir Thomas's is that of the interior of the chapel designed by him for Hertford College, Oxford. Here there is no coloured patterning, but a prodigious amount of carving in stone and wood. I believe that this wonderfully elaborate little building was one of its architect's own favourite productions and it certainly shows that he did not spare any pains to profit by an opportunity such as is rare in modern times. To combine so many small details into a whole that is suave and harmonious will be allowed to be a *tour de force* of technique and the grace of the details themselves is unflinching throughout the work.

The same grace is recognisable in nearly all the Renaissance motifs with which Sir Thomas varied and enlivened the streets and quadrangles of





HERTFORD COLLEGE CHAPEL, OXFORD

Oxford. The external newel-staircase and the covered bridge at Hertford College are well-known examples of his skill in the adornment of awkward necessities. The President's House at Trinity College has a façade of a picturesqueness that would have delighted an Elizabethan, but of a refinement no Elizabethan could reach.

Whether this large amount of *décorative* architecture imitating that of a period itself well represented by authentic monuments was a wise gift to Oxford is a debatable question. On the one side it may be said that the least discordant modern neighbours to old and venerable buildings will be those clad in the clothes of their ancestors, that the nineteenth century had no sufficient style of its own to be worth impressing upon an ancient city, and that in Oxford the persistence of pure Gothic forms as late as in Jacobean days makes a justifying precedent for the re-use of a superseded style. On the other side it may be said that the historical value of the hybrid buildings characteristic of Oxford—the evidence they give of the clash of the Renaissance with the peculiar conservatism of the place, is obscured by the confusion of them with buildings in which similar effects spring from no cause save the will of the designer; that such buildings as the Tylorian and Keble College show in different ways that the nineteenth century did actually have consistent methods of its own; and that the Jacobean Gothic of Oxford was a survival rather than a revival, too accidental to have any value as a precedent.

One of the best lessons the study of architectural history can teach us is to be wary of condemning any *sort* of thing, and to reserve our reprobation for things not good of their sort. Even if we went so far as to maintain that Sir Thomas worked on the wrong lines whenever he imitated Thomas Holt, his Jacobean forerunner at Oxford, we should have said little in his disparagement. Many of the best-loved buildings in the world were designed on the wrong lines, the teacher of architecture is daily confronted by the paradox that such monuments as St. Paul's Cathedral or the church of the Madeleine in Paris or the Pennsylvania station in New York are great popular successes which set the worst possible example to the student. The secret of these buildings is that Wren, that Vignon, that McKim, Mead and White, did what they set out to do, and that what they set out to do was difficult. You may tell people till you are blue in

the face that it is imprudent and unnecessary to cook an omelette while standing over Niagara on a tightrope, you are bound to use every power you possess to persuade those with no vocation for tightrope walking to cook their omelettes in their kitchens, but you cannot prevent the public from applauding a Blondin.

Let us therefore avoid any debate as to whether or not Sir Thomas Jackson's imitation Renaissance was good for Oxford, by agreeing that it has obtained and still deserves very great praise for its skilfulness and elegance. Not only in Oxford is it to be found: there is a group of his buildings in the Oxford manner at Cambridge and a picturesque speech room of the same kind at Rugby. Like other transitional styles, that of the Renaissance is a difficult one to fit with its proper standard of criticism in larger matters than those of detail. With logical planning and studied composition, Renaissance would cease to be Renaissance and acquire the full flavour of neo-Classic. To Hawksmoor's majestic front of Queen's College at Oxford Sir Thomas Jackson opposed, across the street, the front of the Schools, in which he so cleverly recreated the childhood of the virile but saddened style over the way. The planning of the Schools is artless in the extreme, the composition deliberately naïf and quaint. Obviously the standard of the Age of Reason cannot apply to the Age of Recovered Innocence; what in Hawksmoor would be depravity in Sir Thomas would be deliberate insouciance.

It is therefore unnecessary to speak in connection with Sir Thomas's buildings of what we are accustomed now to regard as the larger architectural qualities. Regular planning, unity of design, studied composition, are obtained in few if any of them, and obviously have not been sought after. In place of these we find a collection, often very picturesque, of motifs of considerable decorative merit. As we look at these motifs in succession, we observe through their great variety a strong family likeness; and this connecting characteristic I take to be the expression of the individuality of their author.

At the beginning of this lecture I spoke of Sir Thomas as an apostle of Liberty. I have since suggested that he was unduly bound to the past. There is no essential inconsistency in these statements one with the other, since his bondage was of his own choosing. Within his self-set limits he always worked with freedom, extracting from old ingre-



dients a personal and distinct flavour. This flavour is easy to recognise but hard to define : among the details which contribute to it are broad gables, turrets with roofs of curved outline, very prominent chimneys, and plain wooden-sashed dormers contrasting strongly with the stone-mullioned and leaded windows in the wall surface beneath them. It is not by any of these things, however, that his work will declare its authorship to those sensitive to architectural physiognomy, but by qualities too subtle for analysis, by a certain amiability of mien, a certain conscious discretion, a certain gentle self-assurance.

These qualities are even more apparent in Sir Thomas's Gothic designs, to which I now turn with, I confess, a feeling that I am entering upon the pleasantest part of my critical task. The front of Brasenose College, which I shall put first among the examples I shall take, seems to me a design for which the reasonable nature of its components has secured high qualities unobtainable with less pure material. Here are rhythm, simplicity and graceful proportion, combined with detail of much appropriateness and delicacy. The pretty oriels, it is true, have been bought at a heavy price of convenience since they force the ground floor windows to get out of the way into the most unnatural positions in the rooms inside. This, however, the eye sees little of from without, so that only the inhabitants' hearts need grieve. The gateway in this façade seems to me particularly charming and the tower surmounting it well proportioned and suitable to its place. Seen in conjunction with the well-known spire of St. Mary's Church (the pinnacles of which after being incessantly tinkered by restoring architects were brought to their present satisfactory contour by Sir Thomas himself), the level rise and fall of the Brasenose gables makes perhaps one of the most agreeable pictures that Oxford can show.

By adopting a similar Gothic manner in adding to the Schools that he had built in Renaissance, Sir Thomas set a problem to psychologists, and a trap for archæologists in the future. At Brighton College there is an unfinished range of buildings of his in which this Gothic manner has just sipped from the Renaissance fount and developed the terra-cotta quoins and window dressings of Sutton Place. The admixture of terra-cotta with flint work in this building does not seem well-advised. In the house on the Kensington road, for Mr. Athelstan Riley, brick and terra-cotta led Sir Thomas further toward

the Flemish Gothic style practised by Sir Ernest George than in any other case that I can recall. I have praised the exquisite piano-forte which this house once contained, and there was and perhaps still is much other decoration of great beauty within its walls. Londoners are familiar with its exterior, and many a passer-by must have been amused by the little oriel on the return front with its roof formed of a crown of dolphins.

Sir Ernest George himself once said of Sir Thomas Jackson that in all his work, whatever its superficial style, there was much of Gothic. I think this observation was true. Certainly wherever Sir Thomas expressed his ideas in a Gothic language there can be observed a harmony between matter and manner that often is missing in his works of other kinds. His churches are not the buildings of his most familiar to the public, but the best of them are among his very best achievements. Even when their proportions and mass seem a little uncertain, much of their detail is sure to be delightful. From one particular aspect they seem to me to have real importance in the history of nineteenth century architecture ; they are among the earliest churches of the full Gothic Revival in which the Gothic Revival was not treated *au grand sérieux*. Rickman's Gothic Revival was the taming of a wild and superstitious architecture to fit it for the service of evangelical religion. Pugin's Gothic Revival was an attempted escape from reality, a flight from the age that found him a fanatic to a dream-true in which Christian art was rewarded by God and honoured by man. Butterfield's Gothic Revival was a mission, a gospel of Gothic mortification preached to those who found sinful ease in the æsthetic doctrines of the Great Exhibition. Scott's Gothic Revival was a reconciliation of piety and five-per-cent. blessed by bishops and promoted by deans. Sir Thomas Jackson's Gothic Revival was the procedure of a competent and scholarly architect, who on appropriate occasions recreated and varied without prejudice the forms of an architecture which he knew and loved well.

The earliest church of his which I have seen is that at Hornblotton in Somerset, a charming little building ill-placed in the grounds of its parsonage far from the hamlet it is intended to serve. With its broad roof and timber belfry it is rather of Surrey than of Somerset type, a fact which combines with its unfortunate situation to give it a slightly unnatural air not justified by its reasonable and

unaffected design. Its architectural details are not fully characteristic of its author, retaining as they do much of the "early" character which Sir Thomas must have brought with him from Scott's office. Internally the walls are covered with sgraffito decoration, chiefly floral, the effect of which is excellent on the whole. The use of the sgraffito process for church decoration must have been almost unprecedented in England in the year 1872.

Near Hornblotton Church is the little church of Lottisham, which I have little hesitation in attributing to the same hand, though I have not external evidence as to its authorship. Lottisham Church is pleasing and unpretending, and shows that by 1876, the date of its building, all traces of the influence of Scott had disappeared from Sir Thomas's characteristic style. It also shows little more affinity than the Hornblotton church with local Gothic tradition, and this is significant. It is certainly a fact that up to the nineteenth century the building methods of different localities varied not only so far as was dictated by the materials available but also in accordance with the habits and preferences of the local workmen. Upon this has been constructed a canon that the metropolitan architect of to-day shall cultivate with care the architectural dialect of whatever county he may be summoned upon to work in. Seeing that the localism of ancient architecture was accidental and unconscious, that it was invariably broken in upon when (as rarely happened, be it granted) an architect was called from a distance, and that nowadays the architect with a practice confined within his county is a rarity, it is reasonable to condemn the modern insistence on the revival of local building traditions as unreasonableness and falsely sentimental. I do not know whether Sir Thomas would so have condemned it or whether he regarded the matter with indifference; it is apparent, however, that he never greatly concerned himself when making a design with the regional architectural peculiarities of the place for which it was destined. His close adherence in Oxford to the Oxford manner was plainly only the result of his predilections—since he took that manner to Cambridge and elsewhere when he was employed to design buildings for which he considered it inherently suitable.

I have no record of any complete church designed by Sir Thomas before that of Hornblotton, though I believe that in 1866 he did work that

amounted almost to rebuilding at Dursley Church in Gloucestershire. Immediately after Hornblotton in 1873 he designed the church at East Stratton in Hampshire, which I have had no opportunity of visiting. St. John the Baptist's at Wimbleton was begun in 1875, and is a building of greater size than these others. It is completely mature in design, and so characteristic as to call for a few words of description. The plan is made up of a nave with a north aisle nearly as broad as itself, the one ending in the chancel, the other in a chapel and organ chamber. Both nave and aisle have gable roofs springing at the same height from the ground, there is therefore no clerestory. There is a north porch, large and high, with a parclose above it. The tower, which was to have been broad and square, has never been built. A great peculiarity in the design is the immense buttresses which sustain the south wall of the nave and the west wall of both the nave and the aisle. The ground on which the church is built falls towards the west and south, but not sufficiently to give any appearance of necessity for the bulk of those supports, which are obviously primarily intended to be dramatic, and in a measure succeed in being so. Between nave and aisle is a handsome arcade, its pillars of stone, its moulded arches of beautifully executed brickwork. The church throughout is of red brick with stone dressings, and the tracery of the windows is elaborate. The chancel is practically a continuation of the nave, broad and open, with its walls round the altar decorated with the Ten Commandments written well and large in sgraffito. Everywhere are charming details—the marble mosaic floor of the chancel, the somewhat irrelevant Renaissance pulpit of marble carved and inlaid, the rich stone sedilia, the fantastic ironwork on the doors. The church is well lighted; the windows are set high, and suffer perhaps from being too small and too numerous. The impression which the interior of this church makes upon the mind is one of gentleness and grace, the exterior one of simplicity. Complete harmony cannot be claimed for the design, since the strong contrast between the west and south fronts cut up into narrow vertical strips by the buttresses of which I have spoken, and the east and north fronts where the expression is horizontal, is not counterweighed by any unifying similarity connecting the opposing notions. The tower, had it been built, would, by combining in itself vertical and horizontal accentuation, have



reconciled in great measure the contradictory elements in the rest of the building. Without this tower, indeed, St. John the Baptist's is badly handicapped, but even so it is extremely interesting and should be seen by all those who wish to appreciate justly the work of its designer. In the admirable church at New Annesley, in Nottinghamshire, which Sir Thomas was building contemporaneously with this at Wimbledon, a very successful contrast between vertical and horizontal

ment has been expended. Curdidge has perhaps the better contour, the silhouette of the tower being unusually pleasing. Both are about twelve years younger than the Wimbledon church. I have never seen the church Sir Thomas designed at Narberth in Pembrokeshire in 1881, nor that that he designed for Norfolk Island. In more recent years he was responsible for a mission church at Upper Hellesdon in Norfolk (1903); for St. Augustine's at Aldershot (1907), for the cheap church of St. Luke at



GIGGLESWICK SCHOOL CHAPEL

elements has been achieved by the introduction of tall narrow chancel windows bound to the broad design of the rest by the dominant ridge line of the roof.

The churches at Curdidge and at Northington in Hampshire are smaller than St. John Baptist's at Wimbledon, the former consisting only of nave, chancel and western tower. The material of both is flint, with some elaborate inlay of stone. Northington Church is the richer, with an apse and a belfry storey to the tower on which a great deal of orna-

Wimbledon (1909), and for a church still, I believe, far from complete at Eastrop in Hampshire (1912).

I mention these, since I believe that they complete the list of new churches due to Sir Thomas, if the works at Bourton-on-the-Water in Gloucestershire and Old Malden in Surrey are regarded not as re-buildings but as extensive "restorations." In other parts of this paper I have made no attempt at a catalogue, making an exception here only in the belief that Sir Thomas's activities as a designer of new churches are not realised by many. Beside

churches Sir Thomas designed three college chapels of which that at Hertford College has already been referred to. The chapel at Radley

more successful as a whole, calls for very particular remark indeed. It was built at the cost of a benefactor who left his architect an entirely free hand



GIGGLESWICK SCHOOL CHAPEL : INTERIOR

appears to me one of the least successful of his creations : it is a broad, lowish brick building with rather elaborate stone dressings and carefully designed woodwork, and calls for no particular remark. The chapel at Giggleswick School, if not very much

save for the condition that the chapel must have a dome. I do not know whether it was the school authorities or Sir Thomas that decided that the style should be Gothic ; if the choice was Sir Thomas's it shows great courage and perhaps an



unconscious echo of his old master Sir Gilbert Scott's lifelong ambition to build a Gothic dome. The building as realised consists of a Greek cross, to which are appended a nave, aisles, and antechapel. The arms of the cross are roofed by semi-circular barrel-vaults between which spring pendentives supporting the drum and the dome above it. The nave is roofed with a plaster barrel vault concentric with that of the western arm, of which it is virtually a continuation. This plaster vault is crossed by wooden tie beams, kingposts and struts. The aisles and antechapel are low, with open timber roofs, the west window of the nave and those of the clerestory being tall and important. The arches in the design are sometimes semi-circular, sometimes two-centred pointed, and sometimes four-centred pointed. Externally the roofs generally are of the broken or curb form familiar as that of the Great Hall at Hampton Court. The dome is surmounted by a small cupola; and the re-entering angles of the cross are filled by cupolas surmounting turrets. The scale of the whole is not great.

The outline of this remarkable building on its rugged site is extremely impressive and much of its ornament is delightful. As a work of architecture it bewilders the onlooker, containing as it does a little bit of almost everything. For a monument of the kind a uniformly incombustible roof would seem to be called for, yet here, while there is a dome of terra-cotta blocks and four lengths of stone barrel vault, there is also a long stretch of plaster ceiling, and aisle roofs of unprotected timber. The walls

are built of eight different kinds of stone, the dome is roofed with copper, the principal roofs with cast lead, and the lean-tos with green slates. In the decoration there is the same impartiality as to process; the barrel vaults, for example, decorated in sgraffito, adjoin mosaic pendentives which are divided from the mosaic dome by a drum of masonry banded in colour. Most of these decorations are beautiful in themselves, as also are the cedar furniture and the uniform stained glass by Messrs. Burlison and Grylls.

This is the last building of Sir Thomas's which I shall describe—since restoration works, adequately enumerated in his biographical notices, are not possible subjects for criticism at a distance. I also shall do no more than refer to the tower he designed for Zara Cathedral in Dalmatia. His learned writings, and his delightful personality are also subjects that the title of my lecture does not allow me to touch upon. I do not pretend to have given in an hour an adequate account of the works of Sir Thomas Jackson, nor have I aimed at any sort of completeness. I have merely attempted to put before you representative examples of his design, with such accompanying remarks as might be of assistance in the understanding of them. From these examples you will have seen his great power and versatility in the design of ornament, and I venture to think that as a decorator of exceptional skill and discrimination his name will long be honoured by those who are not too much occupied in producing the architecture of the future to turn their eyes occasionally back upon the architecture of the past.

Discussion

THE PRESIDENT (MR. E. GUY DAWBER, F.S.A.) IN THE CHAIR.

Mr. ARTHUR KEEN [F.] said, in proposing the vote of thanks, I notice from the paper before me, that Dr. Mackail was to have performed this duty, and although I cannot hope to follow him as a speaker, I am very happy indeed to propose a vote of thanks to Mr. Goodhart-Rendel for his Paper. I remember an old schoolmaster I knew, about whom one of his pupils said, "Whatever else it was in his class-room, it was never dull," and anybody who heard Mr. Goodhart-Rendel on a previous occasion when he dealt with the Gothic Revival knew he would not be dull. The comments he has made, and the aphorisms with which he has jewelled his discourse have been beyond praise.

I thought, when he spoke about the generally accepted fact that architecture had died at some time a little after the great French war, that I disagreed with him, and that it would not be difficult to pick up examples here and there that showed that the threads of

tradition had never been dropped, and that one indeed could make a very good case to show that it had continued right through. For, in the earlier part of the nineteenth century there were people like John Emmett, for instance, followed by Butterfield, Philip Webb, Shaw, and many others, whose work was consistently good, and showed extraordinary capacity and ability. He mentioned New Scotland Yard. I was present on the occasion when there was unveiled the memorial to Norman Shaw, a bust and medallion on the wall of the building. Professor Lethaby was near me, and I said, "This building wears extraordinarily well," and he replied, "Yes, in more ways than one," meaning that, apart from the question of the style in which it was built, it contained the essentials of a fine building, which would never be lost as long as the building continued. And there were many buildings of the nineteenth century which possess those essentials.

I regarded Sir Thomas Jackson as one who was always feeling towards something finer of which he was conscious but perhaps never quite reached. He did things which were very nearly extraordinarily fine, but it seemed to me he was striving for something which was a little beyond his reach. But I was sorry we did not get more illustrations of the work he actually did do; we were told of many works he had carried out, but no illustrations of them could be given. Of course, such things as the front of Brasenose, at Oxford, which everybody knows very well, were extraordinarily fine, and I thought the work at Giggleswick, shown on the last slide, was also of very great interest.

I think Mr. Goodhart-Rendel has done us a very great service in bringing before us, in such an interesting way, the work of one who was a man of very great mark in the nineteenth century and in the earlier years of the present century. Among his works are many notable examples, and in particular I would mention the house in Kensington Road, one of the best buildings of its kind, which caused much comment at the time and which will never cease to be regarded as a worthy piece of architecture.

We have listened with the utmost interest and pleasure to all that Mr. Goodhart-Rendel has given us, and I have the greatest pleasure in proposing a very cordial vote of thanks to him for his efforts on our behalf.

Mr. BASIL H. JACKSON [*A.*], in seconding the vote of thanks, said: I have listened to Mr. Goodhart-Rendel's Paper with the greatest interest. I do not think my father ever had very much sympathy with the architectural taste of the 'fifties and the 'sixties, but that probably he had a very considerable share in and responsibility for the changed point of view from which architecture is looked at to-day. Mr. Goodhart-Rendel mentioned my father's love of detail in architecture. I was turning up a book of "Recollections" which he wrote some time ago, in which he mentions that when he started his career he was not decided whether he would become a painter or an architect, and I think, as a reserve, he might have gone to the Bar. Gilbert Scott's advice was taken, and my father records that in his first conversation with him Gilbert Scott talked about the Pre-Raphaelites, who were then at the height of their fame. He was running them down; my father, who was an admirer of the brethren at that time, stood up in their defence. Scott said, "Well, bring your Pre-Raphaelitism into architecture: that is exactly what architecture needs at the present time." I think possibly my father's love of detail and his combining painting and sculpture with architecture may have been the way in which he did bring Pre-Raphaelitism into architecture, for love of detail was one of the chief characteristics of the movement.

I second, with the greatest pleasure, the vote of thanks to Mr. Goodhart-Rendel.

The PRESIDENT: I always look forward with the greatest pleasure to any paper Mr. Goodhart-Rendel may give us. I remember that, only a few months ago, he gave us a most entertaining description and criticism of the prize drawings, and I should like to express the hope that we may induce him to give us a paper upon another great architect and pioneer, Eden Nesfield. I should like to hear his criticism of that architect's work and the influence he had upon architecture. As we know, Eden Nesfield was the forerunner of the work which was carried on by Norman Shaw and his school, which has had such an influence on the domestic architecture of to-day.

From my very early youth I was brought up as a great admirer of the work of Sir Thomas Jackson, and I always looked out for those wonderful drawings from his own hand, which we used to see year after year in the Architecture Room of the Royal Academy. He was, like my old master, Sir Ernest George, able to explain, with his own hands, his designs, which really so few of us, I am afraid, do to-day.

I know Oxford fairly well. There are two buildings there which always give me infinite pleasure. One I have heard criticised as being overlaid with ornament, but it gives me extreme pleasure; and that is the elevation of Brasenose College to the High Street. Any man who has been able to put up a building like that in Oxford leaves a testimonial to his memory as an architect which many of us to-day greatly envy. We also greatly admire his Schools at Oxford, a charming building, full of interesting and delightful detail. I think Mr. Goodhart-Rendel said he had not seen the school chapel at Giggleswick. Some years ago I spent a long morning examining it from top to bottom; the marvellous way in which the detail of that building had been carried out was a revelation to me—the stalls, the organ-case, the mosaic marble work. The whole of the work is a wonderful testimony to Sir Thomas's power as a great designer and master of detail.

The vote was carried by acclamation.

Mr. GOODHART-RENDEL (in reply): I am really more grateful than perhaps I can say for the very kind remarks which have been made. I think Mr. Keen, when he accused me of subscribing to the view, which I quoted, that architecture died at any period, quite misunderstood me, because I have a passion for Butterfield, and almost a diseased admiration for Waterhouse, which makes me forget almost everything else in architecture when I ponder over the detail work of those masters. But I think I am justified in my statement that it was a general creed, if not with architects, with outside critics, that architecture stopped and that was about eighty years before the propounder of it writes. I have merely endeavoured to give a humble tribute to a great decorator and a very distinguished architect.



# The Palace of Knossos: An Example in Conservation

BY THEODORE FYFE [F].

A visit to the site of Knossos after a lapse of 18 years has been an experience of the utmost value. Before describing the changes produced by the hand of time, a brief explanation of the Cretan climate is necessary. There is a rainy season in Crete which begins in the late autumn and persists through the winter until February, or sometimes March. During this annual period storms of great severity, with high wind and driving rain, often occur; snow is constant in the upper regions and is not exceptional in lower lying areas nearer the coast, such as the one in which Knossos is situated. I was quite prepared to see more disintegration than is actually evident. The gypsum paving and many of the wall blocks have suffered severely, especially—and this applies generally—where the material is from a pronounced crystalline stratum. On the other hand, the great orthostatic slabs of the original (Middle Minoan III) west wall and other wall blocks of the same period, being of more closely-knit texture, are still remarkably well preserved: many more years ought to elapse before they lose any of their essential character.

There is practically no evidence of complete disintegration even in the flimsiest rubble walling of the palace, which is a tribute to the tenacity of the binding material, perhaps owing partly to its gradual assimilation of the magnificent lime plaster which covered the surfaces of these walls in their original state. It is clear that Minoan building in material and method was of much greater permanency than would appear at first sight. There was also a careful differentiation of building method to suit various elements in the composition of the palace, which is too intricate a subject to be dealt with here, but it may be said that it increases our respect for the Minoan achievement. The element of wood construction is now very well understood by the world at large, but it has been a standing wonder that the walls could be so remarkably well preserved after the wood had perished and very obviously, in many places, by fire. It now appears evident that most of the lower parts of the rubble walling remain practically as they were built—a mixture of stones, sun-dried brick and the sun-dried clay backing of the lime plaster and woodwork. This was so coherent as, in many cases, to defy destruction.

But after giving due weight to all these factors of permanency, it is quite clear that the palace, as a whole, would gradually become a shapeless and almost unintelligible ruin unless some practical methods were adopted to ensure protection from the elements for its more essential features. These methods have been adopted by Sir Arthur Evans with constant and unwearying forethought in all available time since the first years of excavation. Much of the earlier work of preservation was necessarily tentative and experimental. This is now being replaced to a great extent by more permanent methods, and a lot of additional work has been done. The Cretan mechanic has discovered the properties and uses of reinforced concrete (*béton armée*), and all re-constitutions intended to represent woodwork as well as a

great deal of other necessary construction are now being carried out in this material, by the use of local cement, river sand and gravel (this last of a high quality), together with iron rods and wire in a sound, if somewhat elementary method.

Mention has been made of the word "re-constitution." It is one expressly used and desired to be used by Sir Arthur himself, and it meets the case very well. Such work as this is not, and ought not to be, "restoration." Its objects are (1) to preserve those key positions of the palace plan and structure already existing that are essential for its proper understanding, and (2) to suggest to the competent observer further methods of construction and finish that years of study of evidences in fresco, etc., have elucidated. About the general soundness of outlook in these re-constitutions there can be no doubt whatever: nothing that has been done is either wild or improbable. So far as actual structure is concerned, there is hardly a single bit of the new work that is not based on facts as certain as any such facts can be. Nothing at once so daring or so thorough has ever been attempted on any ancient site in Europe or probably anywhere. The whole achievement is a great example, and the fact that the explorer has carried it out almost entirely with his own unaided resources in single-minded devotion to research is one of which all Britishers may well be proud.

The principal objective of the present year's campaign is the "Royal Villa," an exceptionally interesting house excavated in 1903, in a sheltered position some 200 yards from the N.E. corner of the palace. From the dominant character of its plan (a central seat or throne raised and balustraded from the end of the main hall and lit from above by means of a clerestory well, a most interesting feature) it seems quite probable that this "villa" may have been the summer retreat of some important royal personage, perhaps even of the priest-king himself. The house belongs to the earlier part of the first late Minoan period, which was the great period of the later palace, and it was built at a time when gypsum was relatively plentiful. To this fortunate fact we owe the well-preserved ashlar facing of gypsum blocks in the main staircase and the pillar room with the very complete evidences of wooden beam construction in the floor over the pillar room. Above the first landing the well-preserved main staircase from ground to first floor is bifurcated, and as the only apparent reason for this in the plan is the securing of a certain privacy we have here an additional reason for considering that the villa was a place of some distinction.

Important as are the re-constitution works involved in the provision of the major part of the upper floor of the Royal Villa, they are overshadowed in an archaeological sense by the discovery of additional elements in the great south propylæum of the western half of the palace. It is not possible to say much about these at present; it is sufficient to indicate that they throw a very important light on the relations between Knossos and Tiryns and give greater coherence to the system of upper floor halls

to which they formed the approach. It will now become possible to assemble the entire plan of the propylæum, both in its earlier form, which dates from the last Middle Minoan period (say 1700 B.C.), and in its later form (that of the beginning of the first late Minoan period) after the earthquake, which is the only explanation of certain evidences of destruction and abandonment occurring at a period which might otherwise have had unbroken continuity. In 1900, fallen back from a wall, was found the well-known fresco of the "cup-bearer," belonging to the later propylæum and perhaps the most important piece of Cretan fresco in existence. Beneath the later pavement, .70 cm. down, were found the fragments of the carved stone rosette band, of unsurpassed workmanship and belonging to the earlier propylæum. It is significant of the monumental character of this region of the palace.

Re-constitutions in the western section of the palace now loom as large as, or even larger than, the more obvious ones carried out many years earlier in the Domestic Quarter of the eastern section. When they come to be

finally put on paper and appear in the second volume of Sir A. Evans's book, they will be a revelation of the first importance.

Of the Candia Museum it is difficult to speak in measured terms. It is certainly one of the most important museums in the world. Nowhere else can be found such an unparalleled assortment of objects representing the output of this great civilisation. The museum is bound to grow, as exploration in Crete has still been strictly limited. Sir Arthur has excavated several of the houses near the Knossos palace, but it is clear that there were hundreds of these houses, constituting a great town with the palace, on its acropolis, as a centre. The French have recently excavated an extremely interesting palace at Malia, about 20 miles east of Knossos, near the coast. The Cretan authorities have also laid bare a little ritual centre, right on the coast about seven miles from the port of Knossos, which contained several very large bronze double axes among other finds. The western part of Crete is still practically unexplored.

## The Arts in Early England\*

BY PHILIP MAINWARING JOHNSTON [F.]

Professor Baldwin Brown's great work on "The Arts in Early England" has long since become a classic with architects and antiquaries. The volume under review is only No. 2 in a series of five, published between 1903 and 1921: and Volumes II and V—the latter dealing with the Ruthwell and Bewcastle Crosses, the Gospels of Lindisfarne, and other Christian monuments of Northumbria—are pre-eminently of interest to archæologists of an architectural bent: Volume II, indeed, is a text-book, and in its enlarged and revised form is indispensable to the student. It is both curious and instructive to reflect upon the mutations in the study of our national pre-Conquest architecture. A century ago, when John Carter and John Britton, those veteran antiquaries, who have left us a permanent legacy of invaluable records, had run, or nearly run, their race, "Norman" and "Saxon" were practically convertible terms: and even skilled antiquaries had hardly begun to distinguish between the two in point of technique and date. Britton, in the fifth volume of his "Architectural Antiquities," published in 1821, brought together for the first time a number of engravings of actual Saxon churches, drawn by such artists as Mackenzie and the elder Pugin, and these focussed public attention on discriminating between pre- and post-Conquest architecture. Another earnest student and draughtsman—perhaps the best and most accurate antiquarian draughtsman of his day or ours—the late Mr. Wm. Twopeny, co-operated with these pioneer investigators: but to Mr. Thomas Rickman, F.S.A., belongs the credit of the first systematic attempt to investigate and schedule the surviving example of Saxon architecture, published as an appendix to his "Attempt to Discriminate the Styles of Architecture in England."

\**The Arts in Early England*. New Edition of Volume II: Anglo-Saxon Architecture. By G. Baldwin Brown, M.A., LL.D., F.B.A., etc. London: John Murray, Albemarle Street.

So far, the investigations had been constructive: but here comes in the mischievous work of the destructive critic. Mr. J. H. Parker, having acted as foster-mother to Rickman's offspring, devoured the nurse-child, and calmly announced that there was no such thing as a Saxon church still in existence; and he forthwith in subsequent editions of "Rickman," omitted the appendix on Saxon architecture. Never was there a more complete *volte face*, a more stupid blunder. Most people took Mr. Parker's *ipse dixit* for gospel, and the study of our pre-Conquest buildings became suspect and neglected save by the discerning few.

The next turn of the wheel came with the late J. T. Micklethwaite, F.S.A., who vigorously revived the study in an admirable treatise, teeming with plans, published in the *Archæological Journal* of 1896, in which he was assisted by Mr. C. R. Peers. Mr. Micklethwaite restored the study of Saxon architecture to its rightful position of importance, and prepared the way for Professor Baldwin Brown's great work.

The new edition of Volume II almost amounts to a recasting and is greatly increased in letterpress and illustrations. The 351 pages of 1903 are extended to 508 in 1925. There are many greatly needed corrections and amplifications, and much entirely new matter; while the excellent illustrations have grown from 175 to 210, and now include, besides the photographs of the baluster shafts at Jarrow and Monkwearmouth, other photographic plates of the ornamental coffered work of the Britford arch, the Wolf's head, font and carved angel at Deerhurst, and one of the wonderful flying angels at Bradford-on-Avon. Besides these welcome additions there are fresh plans of Hexham Abbey and of St. Augustine's Abbey, Canterbury—the latter by Mr. Peers, recording the epoch-making discoveries of the late Sir William St. John Hope and the Rev. R. U. Potts, F.S.A., Bursar of



St. Augustine's College—discoveries that cannot be said to be completed to this moment, after more than a quarter-of-a-century's research. By the way, we note that within the last week or two, Mr. Peers has reported, as the result of personal investigation, that the ruined Church of Stone-by-Faversham (p. 116) is of twelfth century work—not in the earliest Saxon group.

Not the least valuable features in the book are the map at the end, on which are marked the churches admitted to Professor Baldwin Brown's list, and that list itself, much extended and amplified in the new edition. It is in regard to these that this reviewer feels bound to enter a gentle but firm disclaimer, first as to the excision of a group of early churches in West Sussex, Surrey and Kent, all possessing marked Saxon criteria. Having had several of these in hand for repair, he is able to speak with an exceptional degree of acquaintance. Two such are admitted to the Professor's list for the first time—Witley in Surrey, and Poling, Sussex, because in each case this reviewer brought to light double-splayed, plaster-coated windows, with the remains of original oak hutters in position at the junction of inner and outer plays. On the other hand, the claims of such churches as Cheam, Hascombe and Wonersh, in Surrey, and Darenth, Wilmington and Wouldham, Kent, where double-splayed windows have been found, are passed over.\* It seems to be ignored that the pre-Conquest builders were not confined to one form of fenestration—the double-splayed—though this is eminently characteristic: but they often employed an ordinary loop, round-headed or triangular-headed, and single or in pairs, as at Sompington, Bosham, Worth and Deerhurst. Thus, at Westwampnet, Sussex, and Fetcham, Surrey, where all the technique and the lavish use of Roman material favour a pre-Conquest date, Professor Baldwin Brown relegates the churches to a post-Conquest period, together with Ford and Walberton, presumably because the windows are not double-splayed. Now it happened that the present writer repaired the little church of Ford in 1899, and found, besides a stone with interlaced ornament, loop windows of a peculiar plan, and an early shallow plinth, marked contrast with similar *Early* Norman features in the same small building. At Walberton besides eastern quoins of Roman brick, a Saxon gable-cross was found in 1904. Another point arises in connection with the Sussex churches of Lymminster and Selham. When repairing the former in 1902, this reviewer found that the twelfth century south doorway of the nave was a "through" opening, without rebate, and that the north doorway at Selham still retains an early wooden door-me, planted on the internal angles of the through opening—an arrangement which, while it exactly resembles the entrance to a primitive English cottage or a mud cabin in Ireland, is entirely unlike the rebated stone frame of all Norman doorways. Dozens of Saxon doorways, scheduled

as such by Professor Baldwin Brown, are planned as "through" openings, that in Earls Barton Church tower (p. 286), for example, or those at Bradford-on-Avon, (p. 296). Surely, too, the interlaced work and dragons at Selham are pre-Conquest, beyond a doubt.

In the north wall of the chancel of Prittlewell Church, Essex, is one of these "through" doorways constructed of Roman bricks, strangely overlooked by the compilers of the Essex Inventory. The bricks do not radiate from the arch-centre.

The Historical Monuments Surveys of the Counties are calling the attention of students to many out-of-the-way Saxon churches, such as the remarkable example at Hadstock, Essex, where the north doorway, again a "through" opening, retains its coeval door and ironwork.†

The extraordinary fact of the survival of a veritable timber spire, of not only the actual shape, but the very timbers of its Saxon builders—the famous four-gabled spire of Sompting—makes one wonder whether there may not be, here and there, a church-roof of this remote epoch. We know that authentic instances of Norman roofs remain. Why not Saxon?

One would have welcomed a chapter on the development from a Saxon nave and square chancel into nave, axial tower and apsidal chancel in the Norman period: another on Saxon building stones, tool marks, *e.g.* the herring bone variety (as at Branscombe, Devon), and the use of stucco, in which the Saxons were adepts: also a chapter on Saxon wall paintings, smith's work, etc.

It is to be hoped that interest in this still obscure 500 years of our native architecture will grow apace—certainly it is a case of the appetite growing with eating—and that Professor Baldwin Brown will be called upon for yet another edition of his great work, which shall be even more comprehensive and detailed, both in text and illustrations. Meanwhile, we can thank him most cordially for a magnificent piece of work: and as "through" and "thorough" are the same word, we can add—"Well and through-ly done!"

## The Library

NOTES BY MEMBERS OF THE LITERATURE COMMITTEE ON  
RECENT ACQUISITIONS.

[These Notes are published without prejudice to a further and more detailed criticism].

### REINFORCED CONCRETE SIMPLY EXPLAINED. 2 vols., by Oscar Faber.

In these two slight volumes, which are in use in the leading architectural schools, the author presents his subject in a form intelligible to the beginner. They are, in his own words, "Suitable for the large and increasing number of people who do not aspire to a specialist's knowledge, but want a clear understanding of the general principles involved in reinforced concrete." Incidentally, they serve as introduction to the author's highly technical work, "Reinforced Concrete Design."

I. M. C.

\*In the case of Hascombe and Wonersh, "restoration" has iterated these. There was another at Stoke d'Abernon, the north wall of the nave, before the disastrous "restoration" of the 'sixties. Two remain at Wilmington, one at Wouldham. At Darenth, where the window is of Roman brick, the mid-wall shutter remains in its groove.

† Even the unimpassioned scribe of the *Survey* schedules this door as "possibly contemporary with the doorway, a pre-Conquest work of the eleventh century"; and adds that "traces of human skin have been found on it."

## Reviews

SOHO BEFORE THE HOUSES. (*The Early History of Piccadilly, Leicester Square, Soho and their Neighbourhood*, by C. L. Kingsford, F.S.A., Cambridge University Press. 12s. 6d. net. 9 in. by 6 in.)

The first development of inner London and the laying out of streets on its fields must always be a fascinating study, but in most districts so little is known of the rural condition or of the growth of buildings that conjecture is apt to cool the reader's interest; in this book we are able to follow the steady tide of buildings spreading along the country lanes and over the fields, and to follow it all the more closely as very many of the actual original houses are still standing.

This book originally commenced as a description of a map drawn in 1585 as an "exhibit" in a lawsuit to decide the ownership of Gelding's Close, a field immediately to the west of Poland Street, and it covers an area of about three-quarters of a square mile extending from a little east of the church of St. Martin's in the Fields to a little west of Bond Street and from Oxford Street to Trafalgar Square, the map having been published in facsimile by the London Topographical Society, and being only two years later than the oldest known map of any part of London. The description gradually and very fortunately developed in Mr. Kingsford's able hands into a volume of 178 pages, thoroughly readable and excellently illustrated, closing with a small scale reproduction of the map overprinted on a modern map of the district drawn by Mr. T. O. Thirtle [A.], which enables the reader to understand the original plan, and adds very greatly to the interest of the book, but it would have been an improvement if this small reproduction could have been rendered clearer by the removal from the block of the stains of age on the original.

The history commences with an account of the ownership of the land from the time when it belonged to Westminster Abbey and carries it through the several ownerships to that of the Crown who granted leases and freeholds in comparatively small areas with licences to build, so that the whole was built over in the short space of a century, leaving it as we now know it except for the formation of Regent Street, Charing Cross Road and Shaftesbury Avenue.

The description of the formation of the streets and squares and the origin of their names, frequently from those of the builders, with the dates and positions of the more important houses and the extent of building along the streets at various dates is explained in such careful detail as to make error impossible.

Most of the original fields were Lammas Lands or common fields for pasture after Lammas in each year, and as a consequence, when building commenced, compensation became payable to the parish; these fields were intersected by numerous lanes which have survived in the part of Regent Street west of the Quadrant (Suggen Lane), Wardour Street (Coleman Hedge Lane), Haymarket, St. Martin's Lane, Shaftesbury Avenue and the northern part of Charing Cross Road, while the line of many of the new streets, such as Savile Row and Beak Street, follow the lines of the old hedges between the fields. A large part of the area was the conduit head from which the City was supplied with water, the Aybrook, which gave its name

to Ebury Manor, following the line of South Moulton Lane. From this connection the present ownership of a large area by the City Corporation takes its origin, the City having the right, exercised in 1628, to acquire lands from the King at 28 years' purchase in discharge of a debt.

Conduit Street runs diagonally across the Conduit Meadow which contained the spring.

The great westward movement of the wealthier classes seems to have been due to a desire for more open surroundings than they had formerly enjoyed, from the frequent references in the quotations from documents, to the desire for fresh air and an outlook over the country, although this desire should have prevented the close building which accompanied the movement, and Mr. Kingsford's regret that Wren, the Surveyor-General, when granting licences to build, did not prepare a town-planning scheme, will be shared by all.

The book forms the best possible argument to all interested to join the London Topographical Society.

GILBERT H. LOVEGROVE [F.].

WESTMINSTER ABBEY AND ITS ANCIENT ART. By J. G. Noppen. Ed. J. Burrow & Co., Ltd., 43, 45 & 47 Kingsway, London

The literature on Westminster Abbey is so extensive, and the subject has been so exhaustively dealt with, that it becomes successively more and more difficult for any fresh writer on the building to break new ground.

Dean Stanley's words in the preface to his *Westminster Memorials*, that "it would be absurd for any modern work to make pretensions to more than a rearrangement of already existing material," naturally applies to-day with even greater truth than it did sixty years ago; for since then, through the laborious researches of many eminent antiquaries, much more of permanent value has been recorded. Apart from several minor, but important, contributions which have appeared in *Archæologia* and the antiquarian and technical journals, in the present century alone several books have been published which must always rank amongst the standard works of reference on the subject.

*Westminster Abbey and its Ancient Art*, the latest book on the Abbey, does not claim to rank in this category, and the reader must expect to find little that has not appeared before. The author, Mr. J. G. Noppen, has aimed at providing "a work which will first meet the requirements of the beginner and then assist him in the more serious considerations of the various interesting studies which the Abbey offers."

For this laudable endeavour the author, as well as having carefully studied the building, has rightly made himself familiar with the latest available works on the subject, and his marked indebtedness to Professor Lethaby is especially acknowledged.

The book is of companionable size and is concisely and interestingly written. It is arranged in six chapters, of which the first three deal with the tradition and history, the Church and the Monastic buildings respectively, and the last three with the work of the craftsmen and the heraldry. Then follow appendices discussing the Confeſſor's Church, the Lady Chapel of Henry III (in which a theory is advanced based on little more than conjecture), and a page on the construction of Henry VII's Chapel.

ERNEST A. R. RAHBULA [A.].

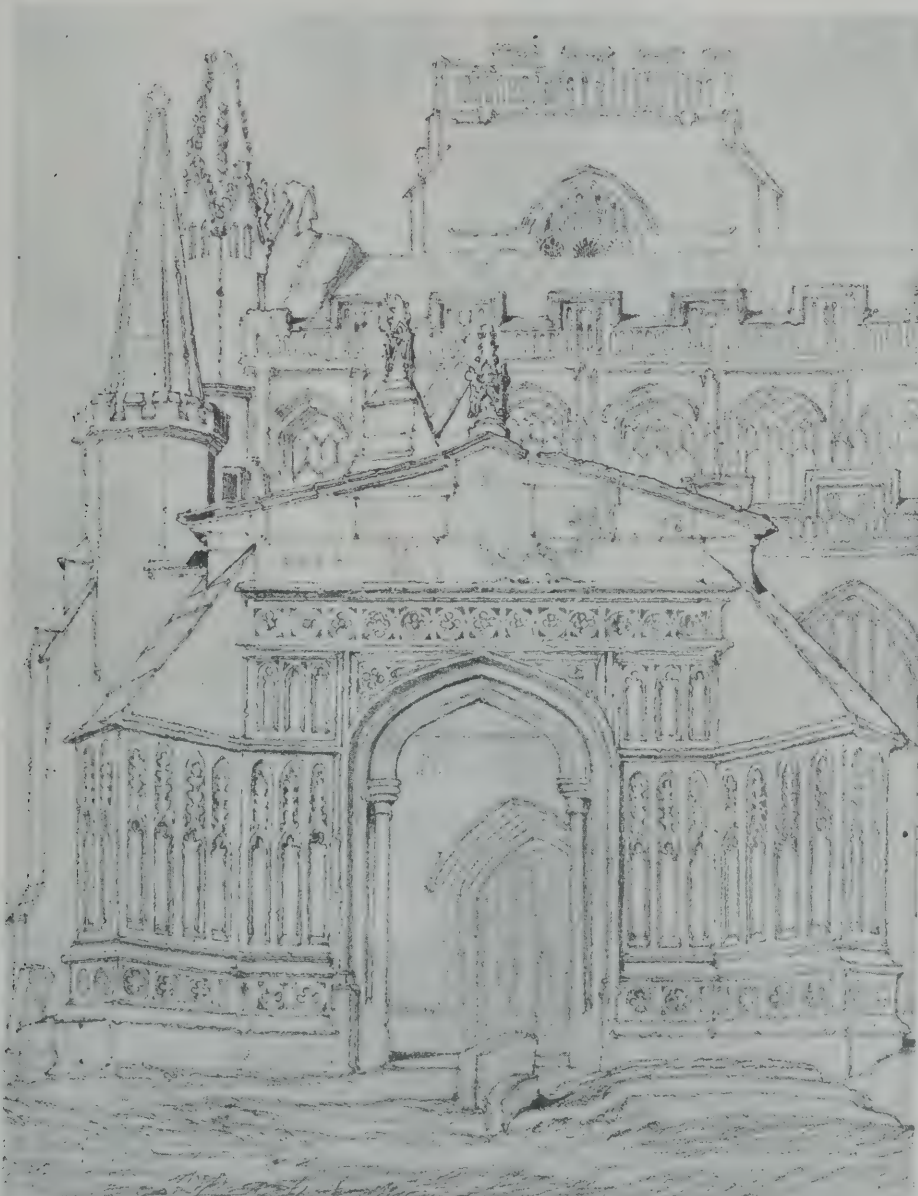


## John Sell Cotman

By W. HILTON NASH [Ret. F.]

There is little doubt that the works of the early masters of Water Colour Art are becoming every day more and more appreciated and a visit to Walker's Gallery, 118

The drawings were collected by the Rev. James Bulwer, who was one of the artist's early patrons, and who probably took lessons from Cotman, or at least was influenced



TERRINGTON SAINT CLEMENT'S CHURCH, NORFOLK: SOUTH PORCH. By J. S. Cotman

in Bond Street, where an excellent collection of the drawings of John Sell Cotman are on view, will appeal to all lovers of water colours and especially to those who are interested in architectural draughtsmanship.

by his works. Mr. Bulwer was himself an artist of some ability.

Born in Norwich in 1782, Cotman had a varied life of success and failure, and, as is the case sometimes with



RUINED PIER OF THE CROSSING OF THETFORD ABBEY CHURCH, NORFOLK. By J. S. Cotman



men of genius, his mind became affected in later years, and he died in 1842, being then sixty years of age.

Among the most notable drawings in the exhibition may be mentioned No. 6, Norwich Cathedral (the interior of Jesus Chapel), a very charming drawing, showing the tomb of Sir Thomas Windham in the foreground. The colouring is delicate and the cool greys and browns predominate. In No. 11, "Window in the Choir of the Grey Friars, Norwich," we have the same rich colour and the grey tone of the stone work is relieved by the red brick which fills in the lower portion of the windows. Cranworth Church, Norfolk" (No. 16), is one of three drawings of this building, and is in colour, the others being in Indian ink wash and pencil.

Perhaps one of the most striking drawings is No. 24, "Ruins of East Barsham Hall, Norfolk." This fine specimen of Tudor architecture is worthily represented, and the colour of the brickwork is enhanced by the grey tone mullions of the windows, and a look of solidity is imparted to the building without any heaviness of colouring. In No. 87, "Terrington, St. Clement's Church," we have an example of pure line drawing unbelieved by any colour, and the rich carving to the entrance porch is cleverly drawn. The ruined "East Window of Valsingham Priory," No. 22, is well represented in one of the most forcible drawings in the collection, and calls to mind the vigour and strength of Piranesi, to whom Cotman is said to have been indebted for some of his effects. The artist was not exclusively devoted to architectural drawings, some of his landscapes have much charm, but there are not many at this exhibition.

Cotman was for some years drawing master at King's College, School, London, and in "The Life of Dante Gabriel Rossetti," by William Turner, we read "The drawing master was the most interesting person of all—the celebrated member of the Norwich School of Painting, John Sell Cotman. He was aged 55 when Dante Rossetti entered the King's College School, an alert forceful-looking man, of moderate stature, with fine well moulded face, which testified to an impulsive nature somewhat orn and worried. He seemed sparing of speech, but strong in what he said. In fact the seeds of madness were marked in this distinguished artist, although, apart from rather excitable or abrupt manner in ruling his bear garden, I never noticed any symptoms of it."

Some visitors to the exhibition may be disappointed at the large number of pencil and wash drawings, many of which were made for the purpose of illustration, and may be seen reproduced in *Specimens of Architectural Antiquities of Norfolk*. We notice the grand old tower of Romer and the quaint round towers of the churches of Epps, Morton and Aylmerton, in a style of architecture peculiar to Norfolk.

Cotman began in later years to make it his study to express detail without slavishly copying it; he had a perfect knowledge of the laws of construction, whether the façade of a cathedral or the massive foliage of a tree. He frequently used the reed pen, which was so often employed by Prout.

Although the present exhibition does not give an adequate impression of the variety and scope of Cotman's work, which included landscapes and seascapes, both

in water colour and oil, for architectural studies it is beyond praise and should on no account be neglected.

*The two illustrations accompanying this article are published by courtesy of Walker's Galleries, 118 New Bond St., W.*

## THE BI-CENTENARY OF SIR JOHN VANBRUGH.

### EXHIBITION AT THE SOANE MUSEUM.

This year being the bi-centenary of Sir John Vanbrugh, who was born 1664 and died March 1726 at his house, now demolished, in Whitehall, a special exhibition has been arranged in the Architectural Library of Sir John Soane's Museum, 13, Lincoln's Inn Fields. It deals with a grandiose project of 1702, the year of Queen Anne's accession, for the completion of Greenwich Hospital. As early as July 1703, Vanbrugh was placed on the Royal Commission for building the Hospital, and this may have been an outcome of his labours now exhibited. So very little is known of his early essays in architecture, before or concurrent with Castle Howard and Blenheim, that a certain amount of incredulity may be expected in respect of the drawings now exhibited. They have been drawn out by the Curator from half drawings and sketches of the temperamental hastiness associated with the idea of the dramatist-architect, who so suddenly, from the public point of view, revealed himself as a great architect.

Such sketches by Sir John Vanbrugh are extremely rare, and those in the Soane Museum are not of a character to have attracted hitherto the attention they deserve. The great scale of the scheme is characteristic. There is an oval forecourt 360 by 270 leading up to a great portico of the same width as that of University College, behind which is planned a great chapel with a dome twice the size of those existing at Greenwich, and three-fifths of that of St. Paul's itself.

This high invention must have alarmed Good Queen Anne, and a second was then produced of a sufficiently monumental character.

In addition to these two schemes, a photo of the first plan of Blenheim, and a sketch for an obelisk commemorating the victory, are shown. Sir John Soane's Museum is open free, 10.30 a.m. to 5 p.m., Tuesdays, Wednesdays, Thursdays and Fridays until the end of August.

## Correspondence

### OLD BRIDGES.

*To the Editor, JOURNAL, R.I.B.A.—*

DEAR SIR,—No one who saw the charming exhibition of sketches and drawings of Old French Bridges can have failed to enjoy it nor, I fancy, to think within himself "Could we not do this in England?"

We have neither the antiquities, nor the rich colouring, of Frances's southern regions, but we must have a goodly number of ancient bridges in very picturesque surroundings.

It occurs to me that the A.A., together with the R.I.B.A., might arrange to collect and create the collection, and that some enterprising publisher might undertake the issue.

The set, or part of it, would form an admirable subject for more than one A.A. excursion.—Yours faithfully,

R. LANGTON COLE [F]

# Thames Bridges

## ROYAL COMMISSION TO BE APPOINTED

Mr. Baldwin stated in the House of Commons on 16 June, in answer to a question by Sir W. Davison, that the Government intend to appoint a Royal Commission to inquire into the whole question of the Thames bridges in London.

The discussion on the matter in the House was reported in *The Times* as follows :

Sir W. Davison (Kensington S., U.) asked the Prime Minister whether he would appoint a special committee of qualified persons to consider and report as rapidly as possible on the bridges over the Thames in the London area, and their approaches, as to what additional bridges, if any, were required, or would shortly be required, and of these which, in the opinion of the committee, was of the greatest urgency and should first be proceeded with ; and, pending the report of such committee, whether representations would be made to the Corporation of the City of London to defer further action with regard to the proposed St. Paul's Bridge.

Mr. Baldwin, Prime Minister (Bewdley) : Having regard to the public anxiety which the question of the London bridges has aroused and to the variety of interests and circumstances which have to be taken into account in this connection, the Government have decided to appoint a Royal Commission in order that the whole subject of bridges over the Thames in the London area may be impartially and authoritatively reviewed.

Sir W. Davison : I thank the right hon. gentleman for the sympathetic reply he has given to this suggestion. Will he also urge the Commission to bring up their report as soon as possible, as the matter is one of great urgency ?

Mr. Baldwin : I think the matter of time is very important.

Mr. Day (Southwark, Central, Lab.) : Will the Government adopt the Royal Commission's Report when it is presented ?

Mr. Baldwin : I do not know that that is a matter for the Government. I must wait till the report is made.

Mr. Sandeman (Lancs., Middleton and Prestwich, U.) : Is work going to begin at Waterloo Bridge at once, or is it going to await the report ?

Mr. Baldwin : I cannot answer that.

*The Times*, in the course of a leading article under the title of "A Wise Decision," commented on the Prime Minister's decision as follows :

Mr. Baldwin stated yesterday at question-time in the House of Commons that the Government intend to appoint a Royal Commission to inquire into the whole question of the Thames bridges in London. This wise decision—the course for which we have consistently pleaded during the more recent stages of the controversy, or rather of the various controversies, which the future of the bridges has aroused—will meet with widespread approval. It opens the door to the only means by which, without prejudice and without favour, the highly complex problem may finally be settled to the general satisfaction. Any other course of action, however wise and however reasonable might be the conclusions reached on each or all of the separate factors of the problem, would inevitably leave a feeling of soreness and of unfair treatment in the minds of one or other of the disputant parties. With the appointment of the Commission, that uncomfortable prospect disappears. The advocates and the opponents of each particular scheme will have full opportunities of laying their respective cases before

an independent and authoritative tribunal. The findings of the Commission cannot possibly please them all. In each individual case—in those notably of the proposed St. Paul's Bridge, Waterloo Bridge, and the bridge or bridges at Charing Cross—they will cause disappointment either to the proposers or to the opposers of the separate undertakings involved. But they should cause no heartburnings on either side, and, because of the broader views which the tribunal will be in a position to take—in comparison with any one of the bodies now concerned—it may be hoped that they will result in the adoption of a consistent and lasting policy which will be generally accepted on the ground that it is most likely to serve the highest interests, in every respect, of London and its present and future inhabitants.

## WATERLOO BRIDGE: L.C.C AND THE ROYAL COMMISSION.

On the understanding that full liberty of action to deal with any emergency that may arise is retained, the London County Council decided on June 22 to defer the rebuilding of Waterloo Bridge, pending the report of the Royal Commission on Thames Bridges. The competition for designs for a new bridge is to proceed. The Improvements Committee brought up an emergency report dealing with the situation created by the decision of the Prime Minister to appoint such a Commission.

## LONDON STREET ARCHITECTURE MEDAL, 1925.

AWARDED TO SIR EDWIN L. LUTYENS.

The jury entrusted by the Royal Institute of British Architects with the Award of the London Street Architecture Medal have announced their award for the year 1925.

After careful examination of drawings and photographs of all the buildings which were nominated for the honour, the jury has given its award in favour of "Britannic House," Finsbury Circus, E.C., designed by Sir Edwin L. Lutyens, R.A.

\* The London Street Architecture Medal is awarded annually to the Architect who has designed a building of merit completed during the three preceding years within a radius of four miles from Charing Cross.

## INDIA OFFICE: SURVEYOR AND CLERK OF THE WORKS.

The Secretary of State for India in Council has appointed Mr. H. M. Edwards to be Surveyor and Clerk of the Works, India Office, with effect from the 21st June, 1926.

On the nomination of the President, Mr. Max Clarke [F.] served on the Selection Board which was appointed to consider the applications for this position.



# The Franco-British Union of Architects

## Sixth Annual General Meeting

BY H. P. L. CART DE LAFONTAINE [A.], O.B.E., T.D.

The annual meeting or Congress of the Franco-British Union of Architects which, up to the present time, has been held in either London or Paris (in accordance with the Statutes of the Union) was, this year, arranged to take place in an English provincial centre—the ancient city of Canterbury.

The innovation originated in a suggestion by the French Committee that it would be a pleasant change to meet in a *Plage de la côte Anglaise*. This suggestion came before the British Committee last November, but a review of the architectural attractions of Folkestone, Brighton or Ramsgate led to the modification of the original suggestion and the selection of Canterbury as a suitable centre.

The very interesting programme which was subsequently drawn up made this meeting one of the most successful which has taken place and had the additional advantage of being unaffected by the coal strike, owing to the use of motor transport.

The following French members attended the meeting : Monsieur A. Defrasse (President) and Mme. Defrasse, M. Bérard ; Bruel (representing the President of the Société Centrale) Chretien-Lalanne Legros (President A.D.G.) ; Lisch ; Louvet (Past President F.B.U.A.), representing the Minister of Fine Arts ; Remaury ; and Schneider (Hon. Secretary S.A.D.G. and F.B.U.A.), who were met on their arrival at Dover by Sir Reginald Blomfield, R.A. (Vice-President), Lieut.-Col. Cart de Lafontaine, O.B.E. (Secretary General), Messrs. H. C. Bradshaw (Secretary, Royal Fine Art Commission) and L. de Soissons, O.B.E., S.A.D.G.

Two visits were arranged on the way to Canterbury and the party proceeded by motor coach—less one member lost in the Customs examination at Dover—to Aldershare Park, the seat of the Earl of Guilford.

Here the visitors were greatly impressed by the fine park with its magnificent trees. Time did not permit more than a very brief visit to the house itself, which is a good example of the English nobleman's seat of the eighteenth century and was in part remodelled some years ago by Sir Reginald Blomfield. The alterations—"restorations" in the best sense of the word—have preserved the character of the house while increasing its convenience.

The next halt was at Sturry Court, which was reached after a drive through some typical English country and villages such as Chillenden, Wingham and Fordwich, which still remain unspoilt examples of the charm of our countryside, where many periods and styles are combined to a harmonious whole.

At Sturry the visitors were received and entertained to welcome tea by the Viscountess Milner. Sturry is one of the most charming Tudor houses imaginable, set in a garden of pleasant lawns and clipped yew hedges with

the little river Stour as a boundary to the north and the churchyard adjoining on the south.

An old tithe barn, with a fine sweep of unbroken roof, mellow in colouring with the passing of time, closes the view opposite the entrance front.

After an hour or so spent in these pleasant surroundings we proceeded onwards to Canterbury, which was reached before dusk and which immediately captivated our French friends. Several of the party, undaunted by their journey, set out after dinner to explore its byways, while others gathered in the lounge of the hotel to one of those informal discussions of architectural problems which have made the Union a valuable adjunct to the older professional societies on both sides of the Channel.

In fact, these informal talks are the *raison d'être* of the annual meetings : it is generally far more profitable to discuss matters of architectural practice such as housing schemes, the preservation of rural amenities, architectural competitions, and new constructional methods and materials than to listen to a series of papers, followed by a dreary and perfunctory discussion and terminated by votes of thanks. For this reason no papers are read at the Congress, no speeches are prepared and the formal meeting is limited to the minimum which is necessary for the transaction of business.

The annual general meeting on Friday, 4 June, was preceded by a meeting of the Bureau, when the nominations of Sir Reginald Blomfield and Monsieur Legros for the offices of President and Vice-President for the ensuing year were formally approved, and it was decided to institute a special class of Past Presidents who would be *ex officio* members of the Bureau and all committees of the Union.

The sixth annual general meeting followed, with Monsieur Defrasse, President, in the chair. The following members were present :—Sir Reginald Blomfield, R.A., P.P.R.I.B.A. (Vice-President), MM. Legros (President S.A.D.G.), Louvet (past President), Lieut.-Col. Cart de Lafontaine (Secretary General), MM. Schneider (Hon. Secretary French Section), Bérard ; Bruel (representing the Société Centrale) ; Mr. H. C. Bradshaw, M. Chretien-Lalanne, Mr. L. de Soissons, O.B.E., S.A.D.G. ; Mr. H. V. Lanchester ; M. Lisch ; Mr. E. Brantwood Maufe ; M. Remaury and Mr. R. Goulburn Lovell (candidate).

In his opening remarks Monsieur Defrasse made a sympathetic reference to the loss we had sustained through the death of a beloved and esteemed President in the person of the late Mr. Paul Waterhouse, and also in one of the most distinguished of our French colleagues, Monsieur L. Chiffot.

The Secretary General then read the minutes of the last annual meeting and gave a brief résumé of the work of the past session ; this included two items of special

interest, the action taken by the Union to support the R.I.B.A. in their protest against the destruction of Waterloo Bridge and a somewhat similar action with regard to the proposed demolition of the Porte de Guise, at Calais, which latter has considerable interest as being one of the few surviving traces of British rule in France.

As a result of the report made by the Secretary General and the subsequent action by Monsieur Defrasse (president) this ancient gateway has now been scheduled by the *Commission des Monuments Historiques*, and it appears probable that a sufficient sum of money to preserve and reinstate it will be forthcoming by private subscription among British residents and merchants of Calais.

Next followed the election of Sir Reginald Blomfield as President, and Monsieur Legros as Vice-President for the ensuing session; the meeting continued, with Sir Reginald in the chair, to the election of the following new members:—

Proposed by the French Committee:—

Mr. G. Leonard Elkington [F.].

Mr. Harold Gibbons, M.C. [F.].

Mr. Winton Newman [F.].

Captain A. Frederick Taylor, M.C. [*Licentiate*].

Proposed by the British Committee:—

Monsieur Cailleux, Secrétaire Général, Société Centrale.

Monsieur Gabriel Veissière, Secrétaire Général, Société Centrale.

Proposed by Monsieur Defrasse, seconded by Mons. G. Legros:—Mr. R. Goulburn Lovell [A.].

There was a short discussion on the subject of architectural competitions and it was agreed that the British and French members of the special joint committee of the Union, appointed in 1924 to investigate and report on the subject of the regulations of international competitions, should meet in London and Paris to consider the draft amended regulations prepared by the architectural societies of France. On the suggestion of Monsieur Defrasse it was agreed that the Secretary General and the Hon. Secretaries of the French and British Sections should be *ex officio* members of the joint committee, which will report to the next annual meeting.

Arising out of the minutes a suggestion was made by M. Defrasse that it might be opportune to draw public attention to the views of their members on the subject of Waterloo Bridge as expressed in the resolution passed at the last general meeting.

This suggestion was welcomed by the President, and the French members thereupon drafted a letter to the Press reaffirming their view that the destruction of an artistic and historical monument of such value would be an irreparable loss to architecture.

The meeting concluded with a resolution that the next annual general meeting should be held in Paris, in May or June, 1927.

Before lunch members were accorded an official reception at the Guildhall by the Right Worshipful the Mayor, supported by the Sheriff and Aldermen, and were much interested in the ancient ceremonial and robes as well as the Mayor's cordial speech of welcome.

During the afternoon the Very Rev. the Dean of Canterbury conducted members round the cathedral, and subse-

quently the members and delegates were entertained to tea at the Deanery—a delightful rambling house of many periods and moods—by Dr. and Mrs. Bell, and spent a very pleasant hour or so in the house and garden, bounded on one side by the old city wall, from which picturesque views of the cathedral are obtained.

On Saturday, 5 June, an all-day excursion was made "the ancient towns," Rye and Winchelsea; the first halting place was at Chilham, where a visit was made to the castle; a fine Tudor house, added to and reinstated with great skill by Mr. Herbert Baker, A.R.A., for the present owner Mr. Edmund Davis.

Here the great terraces and lawns were especially admired by the French members, who subsequently spent a few minutes in looking at the picturesque houses of the old village.

A two hours' run through Ashford, Ham Street and across Romney Marsh brought us to Rye, where some hours were spent in wandering through the curious winding streets of the old town—full of interesting architectural fancies and details—before proceeding on to Winchelsea. After a few minutes spent inside the church, with its fine fourteenth century tombs, we adjourned to the Priory where Mr. George Freeman, K.C., proved a most entertaining and delightful host, and some time was spent in one of the most attractive gardens imaginable, full of fine trees and beautiful vistas, rendered more picturesque by the ruined shell of the Priory Chapel.

The return journey to Canterbury was made by a different route, via the Isle of Oxney, Tenterden and Bethersden.

In the evening the congress dinner at the County Hotel concluded the programme. On this occasion the rule "no speeches" was not strictly observed, and we enjoyed some excellent impromptu speeches by Mr. Dawber, Sir Reginald Blomfield, M. Louvet (representing the Minister of Fine Arts), the Dean of Canterbury, M. Legros (President S.A.D.G. and Vice-President F.S.U.A.), M. Bruel (representing the Société Centrale des Architectes Français), etc.

On Sunday, 6 June, the French members returned to Paris via Sandwich, where the Mayor received them in the ancient Guildhall, and gave a brief history of the Cinque Ports in general and the town of Sandwich in particular.

Then, after lunch at the Bell, Professor Abercrombie and Mr. John Archibald gave an informal address on the important regional planning proposals connected with the industrial development of East Kent, which was of considerable interest to our visitors, and, finally, the last visit before Dover was reached was to Walmer Castle, where the visiting members were received and entertained by the Lord Warden (Lord Beauchamp), and were much impressed by his short address on the importance of such meetings in strengthening and vitalising the Entente Cordiale, which (as his Lordship said) was the only sure foundation for that era of peace and goodwill which was hoped for as the only solution of many difficult problems.

This formed an admirable epilogue and parting message and it was with sincere thanks and mutual good wishes that our French visitors left us after a brief but much appreciated visit.



# Allied Societies

## INCORPORATION OF ARCHITECTS IN SCOTLAND. ANNUAL CONVENTION.

The tenth annual convention of the Incorporation of Architects in Scotland opened in the Council Chambers, Perth, on the afternoon of 4 June, when about one hundred delegates were accorded a civic welcome.

Lord Provost Dempster, who was supported by Bailies Baxter and J. K. Taylor, and Mr. Robert Adam, the Town Clerk, said, in welcoming the members, that unfortunately in Perth, as in many other places, they suffered from the acts of the past in not preserving many points of interest which ought to be said to record the history of the city. Perth was a very old and ancient city, with the closest relation with the story of our country, and it was a matter of regret that they did not something more to show as landmarks in that history. Mr. John Keppie [F.], Glasgow, said, in reply, that they were perhaps more than usually interested in the development of ancient cities. Perth certainly had an excellent record, and architects it was a great grief that some of the interesting things in it had to be, or at least were, done away with. Of course, interesting places there still were, such as ecclesiastical buildings, and the general impression of his colleagues was that Perth was a very fair city. It had many beauties, a lovely situation, and buildings of a very high standard.

Mr. Keppie presided at the business meeting which followed. Mr. W. Glassford Walker, C.A., Edinburgh, the secretary and treasurer, submitted the annual report of the President and Council, which showed that the total membership was now approximately 600, the following elections to membership having been made: six Fellows, fifteen Associates, and 34 students.

The financial statement showed that the ordinary education and benevolent funds were in a satisfactory condition.

Mr. Keppie, in moving the adoption of the report and accounts, commented upon the favourable position of the Incorporation. There must still be, however, he said, a large number of architects in Scotland who were eligible but who had not yet been counted as members. A good deal of the Council's time seemed to have been spent on the question of using fees, a matter on which they had not yet reached a finality of arrangement.

Referring to the education of the young architect, Mr. Keppie said that he could not help thinking the carrying on of office work at the same time as schooling had very distinct advantages. Every year the office and the school seemed to grow more apart, and he was sorry to see matters moving so much in that direction.

A summary of Chapter reports was submitted by Mr. Walker, and satisfaction was expressed with their contents. The meeting unanimously elected Mr. G. P. K. Young [F.], Perth, as President for the ensuing year.

In accepting office Mr. Young said that if he read the wishes of the architects of Scotland correctly, they were that the Incorporation should do all in its power to promote unity in the profession and co-ordination in its practice, and that it should continue to hold high ideals before its members. The Incorporation should devote much of its time, energy and money to the development and encouragement of a higher standard of education and training for those entering the profession. It was to be hoped that a highly skilled and cultured body of men would be created who would be recognised by the public as indispensable in all building matters, and whose professional conduct would be unimpeachable. That, he knew, had been the aim of his predecessors in the past. He believed it was the policy of their Council, and it would have support at all times.

Thanks were accorded Mr. Keppie for his services during the last two years, and Mr. T. M. Cappon [F.], Dundee, as

chairman of the Dundee Branch, expressed gratification at Mr. Young's election.

Messrs. J. Shearer, Dunfermline; A. G. Henderson, Glasgow; and J. Lochhead, Hamilton, were elected Incorporation representatives to the Council for the ensuing year, and Mr. W. J. A. Drummond, C.A., Edinburgh, was re-elected auditor. It was decided that next year's Convention be held at Elgin.

A large company attended the dinner held in the evening. Mr. G. P. K. Young, the President, occupied the chair.

Mr. John Keppie, in submitting "The Town and Trade of Perth," said that the origin of the name Perth was doubtful and various derivations were held by those who differed on the point. Probably it was derived from the Pictish Perth, meaning a "thicket."

The Municipality had always been progressive, and built new municipal buildings, which were most attractive and were executed by a member of their Incorporation, now retired from the profession.

He understood that there was a Guildry Corporation, consisting of seven crafts, somewhat on the same lines as the Trades House in Glasgow, and with direct descent from the Ancient Guild Crafts, and including such unusual crafts as pewter- and gun-smiths.

Perth was created by charter a Royal Burgh in 1210, which charter is attributed to William the Lion. Perthshire is distinguished in many directions, and there were ecclesiastical buildings of considerable interest. Among them were Round Tower, Abernethy, and Dunblane Cathedral, one of the best specimens of its type and with a tower going back to Norman times. This church was beautifully restored by their founder, Sir R. Rowand Anderson, and was one of the best restorations of church building in existence. In Perth also there was St. John's Church, presently being restored by Sir Robert Lorimer. Among the castles were Huntingtower, celebrated in song; Doune, Elcho, Drummond, Huntly and Kinnaird, and many comparatively modern castles of considerable size. Mr. Keppie, in referring to the past celebrities of the city, recalled the poetry of Lady Nairne, the paintings of Thomas Duncan, and the water-colours of Cranston, and the musician Neil Gow.

Lord Provost Dempster, in reply, said the city of Perth had made considerable strides during the last fifty years. It had been called the Fair City, but when some of them remembered the slums and insanitary and unhealthy buildings which had existed, they had great doubt as to what the origin of the name was. To-day they might see Kinnoull Hill from almost any part of its open and clean streets, and they might congratulate themselves that they had reached a stage in its development which was extremely satisfactory. That state of affairs had been largely brought about by the energy, the foresight, and the capacity of his predecessors in office during the last thirty or forty years.

Mr. Alexander MacDuff, of Bonnard, gave the toast of "The Incorporation of Architects in Scotland."

Mr. G. P. K. Young, the President, in responding to the toast, said that he thought that the members of the Incorporation recognised that they were trustees of a great heritage which they must hand down better than they found it. The architecture of Scotland was as full of vitality to-day as ever it was.

He made a plea for the greatest sympathy between architect, employer and workman on everyday jobs and for the infusion into their work of that interest and pride which at one time seemed to prevail in their profession and in the trades not so very many years ago. Without that pride they could not get the best out of themselves, and they might compare the ancient guilds, whose aim was the production of quality, with the Trades Unions of to-day, where excellence of workmanship, if not discouraged, was at least ignored. That Incorporation was doing great work for the architects of Scotland. It brought members of the profession from all parts of the country in consultation, increasing their knowledge and the value of their work to the public. That, he believed, was the aspiration of all architects.

### THE CENTRAL SCHOOL OF ARTS AND CRAFTS. ANNUAL EXHIBITION.

If it is possible to assume a defect in our increasingly admirable system of architectural education that defect or weakness would seem to lie in its almost inevitable restriction to what primarily relates to the art of building. Even so, the limitation would be on so broad a basis or spread over so wide a field that a definition of its boundaries seems hardly possible. In fact, remembrance of even the Vitruvian recital of the branches of knowledge required of an architect is sufficient to suggest that only superficial acquaintance with them would be achieved in a lifetime. A recent visit to the annual exhibition of students' work at London's Central School of Arts and Crafts furnishes a reminder that—however effectively our architectural and building schools fulfil their functions—the training that this and other establishments of its kind provide must be embraced in any really comprehensive view of what constitutes architectural education—particularly at a time when the craftsmanship aspect of an architect's work is happily receiving greater attention than was recently the case. The principle of the purely building side of the work at the Central School is stated to be "structure and construction founded upon modern needs, materials and inventions"—the work of the past being studied to develop the imagination. But there are other things to notice. That section is also intended "for craftsmen and others who require a knowledge of architecture"; if used for which aim alone an important and necessary function is fulfilled. The craft side of essential interest to us would seem to be that relating to "Painted and Sculptured Architectural Decoration" under a controlling staff of considerable variety and distinction, whose aim is the undertaking and practice of all forms of decoration associated both internally and externally with building. So important a purpose would well justify the existence of a craft school and, were its purpose realised or even attempted, afford claims to the interested sympathy of a body representative of architecture.

The school has distinct sections dealing with the crafts of furniture making (with wood carving, gilding and gesso); metal work, in iron, brass and copper; bronze and other metal casting; wall papers and woven and printed fabrics and embroidery—including actual weaving and the working of tapestry; stained and painted glass; mosaic decoration and mural painting (including, apparently, "buon fresco"); pottery, and book production, lettering, illuminating, and posters; a side of the work in which the school has acquired repute. The favourable impression received from the exhibited work is confirmed by such examination as has been possible of its method of working, that seems to base the arts of design—as, indeed, they should be—upon the understanding of and right use of material. There can be little doubt that the experienced advisers, director and teaching staff, are here achieving success in the effort made to renew and carry on the best expression of traditional crafts ancillary to architecture. And it is all to the good if one can still note traces of the influence of Professor W. R. Lethaby, who is understood to have had a directing hand in the formation of the school and who, as is well known, has

always held to the dependence of architecture upon craftsmanship. It may safely be said that attention to this most interesting source of craft training and method on the part of students of architecture generally, should not be without beneficial results to them and to the buildings of the future.

F. R. HORNES [F.R.S.]

N.B.—The School Exhibition remains open until the end of the present month.

### THE SCALE OF CHARGES.

The Chairman of the Practice Standing Committee has received a letter on the subject of the Scale of Charges which he thinks may be of interest to members generally. He has accordingly arranged for its publication in the JOURNAL in the hope that it may elicit correspondence which will assist the Practice Committee in considering the point.

29 April 1926.

#### SCALE OF CHARGES.

DEAR MR. DOUGLAS SCOTT,—In the course of a good many years of professional experience I have often had my attention called to a situation which, in my judgment, does more harm to architects in the public estimation than any other—I might almost say than all others put together. I can best illustrate it by giving one out of many actual cases that have come to my notice.

A client calls upon an architect and says that he wishes to build a house for himself if he can get the kind of thing he wants for the sum that he actually has at his disposal—£2,000. He describes to the architect the accommodation and type of house he wants. The architect tells him that he can get the house for that money. He is instructed to prepare sketch plans, these are discussed and approved, and he then makes further drawings and gets tenders in. The lowest tender is £3,000. The client says that he hasn't got £3,000 and that, as it appears after all he can't get what he wants for the money, he will give up the idea of building. The architect sends in his account and charges 4 per cent. on £3,000, the lowest tender—£120. The client is amazed, and denounces the architect in particular and the profession in general, and for the rest of his life warns his friends and relations to be very careful about ever going to an architect. One incident of this kind can do infinite harm to the profession, particularly in a small town or suburb.

For my own part, I think the architect's action is quite unjustifiable, and I doubt if he would ever get his £120 if he took the client to law about it. It seems to be repugnant to ordinary conceptions of justice.

In the first place, the architect has rendered no professional service of any kind to the client. He has merely wasted his time and caused him annoyance.

In the second place, by charging on the basis of the adopted, he is asking the client to pay as much for



abandoned work (4 per cent. on £3,000 = £120) as he would have been entitled to charge if the work had actually been done in accordance with the client's wishes (6 per cent. on £2,000 = £120).

In the third place, he is acting on a principle by which he would get higher fees the less practical ability he showed. If his preliminary estimate was so ill-judged that the lowest tender was £4,000 he would ask for £160. If the lowest tender was £5,000 he would want £200, and so on—a *reductio ad absurdum*. The worse he did his work the more he would be paid for it! It seems to me that the R.I.B.A. ought to do two things.

It ought to lay it down clearly that in the case of abandoned work the architect's fee is to be based *not* on the lowest tender but on the architect's preliminary estimate agreed by the client.

Next, it ought to consider whether, in such a case as have given above (where it is definitely proved that the client made it quite clear that he could not and would not build unless the house could be built for the sum stated, and the architect gave it as his professional opinion that the house *could* be built for that sum), the architect is entitled to any fee whatever. In justice and common sense I don't think he is. But the second point is, I think, less urgent than the first. I do not believe the capable and practical men who serve on our Practice Committee can quite realise how much general harm is done to the reputation of the profession by a few of their less competent and less practical brethren.—Yours very sincerely,

(Signed) EXPERIENCE.

J. Douglas Scott, Esq.,  
Chairman,  
Practice Standing Committee.

#### LIMITED COMPETITIONS.

The following letter has been addressed by Mr. John Hunt [F.] to the Secretary of the R.I.B.A.

10, Royal Crescent, W.11.  
June 12th, 1926.

DEAR SIR,—I am afraid I am a most inattentive member of the Institute, as I never realised before the extent to which the committees responsible have interfered with the private rights of members.

I wrote to you asking for another copy of the voting paper, but please do not trouble to send it. On reading it again and partly reading the long explanation accompanying it, I do not wish to vote on a matter—*private competitions*—which, in my opinion, should never have been dealt with at all, and in a way lend myself to avowing approval of a step taken. I cannot conceive that anybody should interfere in a private competition where members who are asked to compete naturally agree to the conditions—if they do compete—nor do I see why a member of the public should be restricted in the amount he may wish to expend should he ask his architects to furnish him with evidence of their ability, for that is what it amounts to. If there was no question of legislation in view, I should not

object or care much; for in that case if one objected to the rules passed by the active members with the consent—or, as I conceive it to be the case in the R.I.B.A., the lack of dissent by the inactive members—one can always resign one's membership and still follow one's profession; but it seems that will not be the case if future events follow the course desired by the executive of the R.I.B.A., and I would not be willing to restrict individuals in the manner suggested and prevent their earning a livelihood.

Yours faithfully,

JOHN HUNT.

I have sent the voting paper with some comments to a source that I hope may have some influence in restraining the activities of our governing body in these directions. Under the circumstances, I think a greater time should elapse before the voting papers are returned, and there should be an alternative giving members the opportunity of expressing their opinion that the executive body should be instructed not to interfere with private matters. At present they are like the man who was asked: "Do you still beat your wife?" Neither yes nor no avails him from an affirmative.

## Obituary

### THE LATE MR. T. B. WHINNEY [F.].

Mr. T. B. Whinney, who died on 2 May, was educated at Charterhouse and the Royal Academy Schools. He was articled to Mr. E. A. Gruning and became an Associate in 1884 and a Fellow in 1901.

Mr. Whinney will be remembered for the large number of banks he has erected during the last thirty years for the Midland Bank, with which he became identified very early in his professional career. Under the chairmanship of the late Sir Edward Holden the Bank expanded rapidly, and the architectural work which resulted occupied Mr. Whinney to the exclusion of almost any other work. His knowledge of banking requirements was unrivalled, and he was able to specialise in this work and to train an expert office staff.

Among more than two hundred banks which he erected it is difficult to mention particular examples of his work, but perhaps the Midland Bank at Golders Green is one of the best, as it certainly was one of his own favourite designs. The Midland Bank in Pall Mall, which is just completed from his designs, is probably the most important building for which he is responsible in London.

In 1923 he was joined in partnership by his son and myself, who continue the practice.

Mr. Whinney was a good sportsman and fond of travel, for which he found a good deal of time in his early days. He was an excellent water-colour artist, and exhibited on several occasions in the water-colour room of the Royal Academy.

These notes of his career contain an outline only of the busy and successful life he led, but few men have achieved his output of sound and useful work. By those who knew him intimately, his colleagues and staff, he was held in affectionate regard as a generous friend and chief, whose personality made a lasting impression upon all who had the privilege of working with him.

H. AUSTEN HALL [F.].

## NOTES FROM THE MINUTES OF COUNCIL.

31 MAY 1926.

## ARCHITECTS' DEFENCE UNION.

A scheme for the establishment of a Professional Defence Union for Architects, prepared by the Practice Standing Committee, was approved by the Council. Steps will be taken at once to lay it before the profession.

## LIMITED COMPETITIONS.

Under the provisions of the new Bye-law 70 it was decided to hold a referendum on the subject of the control of Limited Competitions.

## SCALE OF CHARGES.

On the recommendation of the Practice Standing Committee it has been decided that when the present edition of the Scale of Charges is exhausted it should be reprinted in similar form to that of the Surveyors' Institution, *i.e.*, in the form of a brochure 4½ in. by 3 in., and that the price should be 3d. a copy.

## FEES OF SPECIALISTS AND CONSULTANTS.

On the recommendation of the Practice Standing Committee the Council have decided to recommend the General Body to approve of the following revision of Clause (f) of the Conditions of Engagement which form part of the Scale of Charges.

(f) In all cases where special construction or equipment is necessary, a Consultant or Consultants may be required. His or their selection shall be at the Architect's discretion, in consultation with Client. The fees of such Consultants or Specialists are not included in the Architect's percentage charges.

## LAW OF PROPERTY ACT, 1925.

The Council have directed that observations by Mr. Douglas Scott on the Law of Property Act, 1925, should be published in the JOURNAL for the information of members.

## ECONOMICS IN BUILDING PRACTICE.

On the recommendation of the Science Standing Committee the Council have invited the Institute of Builders to appoint a small sub-committee to receive, consider and report monthly upon suggestions for eliminating processes in modern building practice which do not afford additional durability and/or strength commensurate with their cost in labour and material, with a view to exchanging information and eventually of submitting a report to the Main Committee or Councils.

## REGULATIONS FOR STEEL FRAMED BUILDINGS.

The Council have approved of the publication in the R.I.B.A. JOURNAL, for the information of members, of a report by the London Building Acts Committee of the Royal Institute of British Architects with respect to the Construction in London of Buildings with a Skeleton Framework of Iron and Steel.

## REINFORCED CONCRETE REGULATIONS.

On the recommendation of the London Building Acts Committee the Council have decided to obtain a number of copies of the Joint Committee's report for the use of interested committees and members and that it be priced at 1s. a copy, and that a note be published in the JOURNAL that copies could be obtained free on application.

## NATIONAL ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS.

Mr. James Lochhead was appointed as a delegate of the R.I.B.A. to the Twelfth Annual Conference of the National Association for the Prevention of Tuberculosis to be held on 1, 2 and 3 July 1926.

## THE UNIVERSITY OF SHEFFIELD.

Mr. F. E. Pearce Edwards and Mr. E. Vincent Harris were appointed as representatives of the R.I.B.A. at the celebration of the Coming of Age of the University of Sheffield, which will take place on 30 June and 1 and 2 July 1926.

## INTERNATIONAL FEDERATION FOR TOWN AND COUNTRY PLANNING AND GARDEN CITIES.

The following members were invited to serve upon the Council of the International Federation for Town and Country Planning and Garden Cities:—

Professor S. D. Adshead.  
Sir Reginald Blomfield, R.A.  
Mr. W. Harding Thompson.  
Mr. W. Alexander Harvey.  
Mr. H. T. Buckland.

## INTERNATIONAL CONGRESS ON BRIBERY AND ITS PREVENTION.

Mr. J. Douglas Scott was appointed as official representative of the R.I.B.A. at the International Congress on Bribery and its Prevention, which was held at the Royal Society of Arts on 8 and 9 June 1926.

## THE BRITISH SCHOOL AT ROME.

Sir Reginald Blomfield, R.A., was reappointed as one of the two representatives of the R.I.B.A. on the Council of the British School at Rome.

## GUILDFORD CORPORATION BILL, 1926.

On the recommendation of the Practice Standing Committee the Council have invited the Guildford Corporation to consider, in any amendment of the Guildford Corporation Bill, 1926, the desirability of introducing clauses on the lines of Part VIII of the London Building Act, 1894.

## BRISTOL CORPORATION BILL, 1926.

On the recommendation of the Practice Standing Committee the Council have requested the Bristol Society of Architects to consider the desirability of asking the Bristol Corporation to amend the Bill on the lines suggested.

## NOTICE.

## EXHIBITION OF COMPETITION DRAWINGS FOR BANK OF LIVERPOOL AND MARTINS, LTD.

An exhibition of the competition drawings for the new Head Office buildings of the Bank of Liverpool and Martins, Ltd., will be held in the R.I.B.A. Galleries.

It will be open to the public on Wednesday, 23 June, and will remain open till Saturday, 3 July, from 10 a.m. to 7 p.m. (Saturday, 5 p.m.).

## WARNING TO MEMBERS.

Members are victimised from time to time by impostors who call upon or write to them claiming to be architects in distress. Members are advised before yielding to appeals of this character to communicate with the Architects' Benevolent Society.



## THE ANNUAL ELECTIONS.

The results of the Annual Elections are recorded in the subjoined Report of the Scrutineers which was read at the General Meeting on Monday, 14 June.

The Scrutineers appointed to count the votes for the election of the Council and Standing Committees for the Session 1926-1927 beg to report as follows:—1,451 envelopes were received—467 from Fellows, 568 from associates, and 416 from Licentiates. The result of the election is as follows:—

## COUNCIL, 1926-1927.

PRESIDENT.—Edward Guy Dawber, F.S.A. (unopposed).

PAST-PRESIDENTS.—Sir Reginald Blomfield (unopposed); John Alfred Gotch (Kettering) (unopposed).

VICE-PRESIDENTS.—*Elected*: Arthur Keen, 1,197 votes; Mr. Percy Scott Worthington, 1,128; Sir Banister Fletcher, 1,049; Henry Philip Burke Downing, 873.—*Not Elected*: Percy Thomas, 850. 1,377 voting papers were received, of which 14 were invalid.

HON. SECRETARY.—Edwin Stanley Hall (unopposed).

MEMBERS OF COUNCIL.—*Elected*: Major Harry Barnes, 1,014 votes; Walter Cave, 953; Sir John James Burnet, 790; Harry Stuart Goodhart-Rendel, 774; Thomas Ridley Milburn, 747; Henry Martineau Fletcher, 733.—*Not Elected*: Sir Alfred Brumwell Thomas, 672; Alfred John Taylor, 533; Herbert Arthur Welch, 446; Edward Brantwood Maufe, 299; Charles Lovett Gill, 428; Henry Alderman Dickman, 29. 1,377 voting papers were received, of which 16 were invalid.

ASSOCIATE MEMBERS OF COUNCIL.—*Elected*: Michael Theodore Waterhouse, 792 votes; Harold Chalton Bradshaw, 55; Professor Lionel Bailey Budden, 682.—*Not Elected*: Michael John Tapper, 499; Stewart Kaye, 301; Robert Norman Houghton Mackellar, 270; Hon. Humphrey Arthur Pakington, 223; John Batty, 188; Frank Henry Heaven, 51. 1,377 voting papers were received, of which 36 were invalid.

LICENTIATE MEMBERS OF COUNCIL.—*Elected*: Percy John Valdrum, 761 votes; Edward Henry Heazell, 447.—*Not Elected*: Joseph William Denington, 356; Herbert Evans Eyriss, 354; Arthur Grove, 313; Hugo Ritchie Bird, 260. 1,377 voting papers were received, of which 27 were invalid.

REPRESENTATIVES OF ALLIED SOCIETIES IN THE UNITED KINGDOM OR THE IRISH FREE STATE.—*Five Representatives from the Northern Province of England*.—Harry Smith Fairhurst (Manchester Society of Architects); George Reavell (Northern Architectural Association); T. Butler Wilson (Leeds and West Yorkshire Architectural Society); John Malcolm Dossor (York and East Yorkshire Architectural Society); Edmund Gertram Kirby (Liverpool Architectural Society). *Three Representatives from the Midland Province of England*.—Albert Thomas Butler (Birmingham Architectural Association); Edward Thomas Boardman (Norfolk and Norwich Association of Architects); James William Fisher (Northamptonshire Association of Architects). *Two Representatives from the Southern Province of England*.—George Churchus Lawrence (Wessex Society of Architects); Percy Morris (Devon and Cornwall Architectural Society). *Three Representatives of Allied Societies in Scotland*.—Nominated by the Council of the Incorporation of Architects in Scotland: John Keppie (Glasgow); Thomas Forbes MacLennan (Edinburgh); George Penrose Kennedy Young (Dundee). *One Representative of the South Wales Institute of Architects*.—Charles Frederick Ward. *One Representative of the Allied Societies in Ireland*.—To be nominated by the Council of the Ulster Society of Architects.

REPRESENTATIVES OF ALLIED SOCIETIES IN THE BRITISH DOMINIONS OVERSEAS.—To be nominated by the Council of

each of the following: The Royal Architectural Institute of Canada, the Federal Council of the Australian Institutes of Architects, the New Zealand Institute of Architects.

REPRESENTATIVE OF THE ARCHITECTURAL ASSOCIATION (LONDON).—John Alan Slater.

REPRESENTATIVE OF THE ASSOCIATION OF ARCHITECTS, SURVEYORS, AND TECHNICAL ASSISTANTS.—Charles McLachlan.

CHAIRMAN OF THE BOARD OF ARCHITECTURAL EDUCATION.

CHAIRMEN OF THE ART, LITERATURE, PRACTICE AND SCIENCE STANDING COMMITTEES.

HON. AUDITORS.—Alfred Harold Goslett [F.] (unopposed) Frank John Toop [A.] (unopposed).

ART STANDING COMMITTEE.—FELLOWS.—*Elected*: Walter Tapper, 1,008 votes; Arthur Keen, 963; Francis Winton Newman, 920; Professor Stanley Davenport Adshead, 899; Henry Philip Burke Downing, 868; Halsey Ricardo, 814; Sir John James Burnet, 791; Harry Stuart Goodhart-Rendel, 787; Louis de Soissons, 773; Philip Dalton Hepworth, 761.

—*Not Elected*: Francis Thomas Verity, 677; Howard Morley Robertson, 609; Heaton Comyn, 540; Leo Sylvester Sullivan, 460; Frederick Robert Hiorns, 459; John Duke Coleridge, 421; William Thorpe Jones, 373; Arthur William Kenyon, 370; Arthur Heron Ryan Tenison, 325. 1,352 voting papers were received, of which 36 were invalid.

ASSOCIATES.—*Elected*: Leonard Holcombe Bucknell, 1,092 votes; Cyril Arthur Farey, 1,087; Harold Chalton Bradshaw, 878; Michael Theodore Waterhouse, 845; Hon. Humphrey Arthur Pakington, 780; William Harding Thompson, 779.

—*Not Elected*: Lt.-Col. H. P. L. Cart de Lafontaine, 770; Herbert James Rowse, 678; Ronald Aver Duncan, 655. 1,352 voting papers were received, of which 19 were invalid.

LICENTIATES.—*Elected*: Reginald Francis Guy Aylwin, 1,018 votes; Francis Robert Taylor, 974; Archibald Stuart Soutar, 961.—*Not Elected*: Samuel George Short, 670. 1,352 voting papers were received, of which 24 were invalid.

LITERATURE STANDING COMMITTEE.—FELLOWS.—*Elected*: Martin Shaw Briggs, 963 votes; Louis Ambler, 959; Arthur Stratton, 937; Major Hubert Christian Corlette, 874; Basil Oliver, 874; Charles Sydney Spooner, 816; Arthur Hamilton Moberly, 772; Henry Martineau Fletcher, 733; David Theodore Fyfe, 730; Sir Alfred Brumwell Thomas, 705.—*Not Elected*: Charles Harrison Townsend, 685; Stanley Churchill Ramsey, 651; Oswald Partridge Milne, 619; Arthur Stanley George Butler, 617; William Henry Ansell, 594; Sydney Decimus Kitson, 576; Frederick Charles Eden, 547; Ronald Potter Jones, 365. 1,341 voting papers were received, of which 17 were invalid.

ASSOCIATES.—*Elected*: Charles Cowles-Voysey, 909 votes; Henry Castree Hughes, 872; Professor Frank Stephen Granger, 855; Grahame Burnell Tubbs, 814; Professor Lionel Bailey Budden, 810; Charles Edward Sayer, 767.—*Not Elected*: Arthur Trystan Edwards, 711; John Murray Easton, 655; Isabel Maud Chambers, 623; Charles Holloway James, 511. 1,341 voting papers were received, of which 22 were invalid.

LICENTIATES.—*Elected*: Arthur Edward Henderson, 911 votes; W. Hodgson Burnet, 844; Capt. William Thomas Creswell, 825.—*Not Elected*: Arthur Joseph Penty, 589; Frederick Herbert Mansford, 440. 1,341 voting papers were received, of which 55 were invalid.

PRACTICE STANDING COMMITTEE.—FELLOWS.—*Elected*: William Gillbee Scott, 983 votes; Frederick Chatterton, 975; Gilbert Henry Lovegrove, 952; George Hastwell Grayson, 951; David Barclay Niven, 945; William Henry Atkin-Berry, 932; Henry Victor Ashley, 922; Edward Charles Philip Monson, 775; Edward John Partridge, 755; Delissa Joseph, 748.—*Not Elected*: Arthur John Hope, 679; Harry Teather, 658; Henry Alderman Dickman, 611; Percival Maurice Fraser, 605. William Ernest Watson, 576; Edgar Sefton Underwood, 357. 1,344 voting papers were received, of which 12 were invalid.

**ASSOCIATES.**—*Elected*: John Douglas Scott, 955 votes; George Leonard Elkington, 946; Philip Waddington Hubbard, 923; Charles Woodward, 904; Harry Valentine Milnes Emerson, 799; Horace Cubitt, 791.—*Not Elected*: William Henry Hamlyn, 715; Eadred John Tennant Lutyens, 633; Victor Bain, 537; Frederick Richard Jelley, 293. 1,344 voting papers were received, of which 22 were invalid.

**LICENTIATES.**—Joseph William Denington (unopposed); Capt. Augustus Seymour Reeves (unopposed); John Carrick Stuart Soutar (unopposed).

**SCIENCE STANDING COMMITTEE.**—**FELLOWS.**—*Elected*: Herbert Duncan Searles-Wood, 1,029 votes; Dr. Raymond Unwin, 941; William Edward Vernon Crompton, 893; Major Charles Frederick Skipper, 874; Francis George Fielder Hooper, 842; Alan Edward Munby, 841; Professor Ravenscroft Elsey Smith, 831; John Edward Dixon-Spain, 808; Alfred John Taylor, 756; Digby Lewis Solomon, 748.—*Not Elected*: William Milburn, Junr., 669; James Ernest Franck, 657; Robert Stephen Ayling, 577; George Reginald Farrow, 572; Augustine Alban Hamilton Scott, 545; Ernest Hollyer Evans, 445; Thomas Wallis, 435; David Pugh-Jones, 304. 1,347 voting papers were received, of which 16 were invalid.

**ASSOCIATES.**—*Elected*: Edwin Gunn, 1,091 votes; Hope Bagenal, 1,056; Harvey Robert Sayer, 949; Alfred Ernest Mayhew, 834; William Thomas Benslyn, 746; Richard Goulburn Lovell, 690.—*Not Elected*: John Dovaston, 663; Percy William Barnett, 651; Percy Morrey, 641. 1,347 voting papers were received, of which 18 were invalid.

**LICENTIATES.**—*Elected*: Percy John Waldram, 1,080 votes; George Nathaniel Kent, 983; Lieut.-Col. Percy Alfred Hopkins, 920.—*Not Elected*: Albert Lakeman, 665. 1,347 voting papers were received, of which 18 were invalid.

**Scrutineers**—Henry Lovegrove [*A.*] (Chairman), T. Frank Green [*F.*], Charles H. Freeman [*L.*], E. J. W. Hider [*F.*], F. B. Nightingale [*A.*], Robert Lowry [*F.*].

## Competitions

### CENOTAPH FOR LIVERPOOL.

The Corporation of Liverpool invite architects to submit designs in competition for a Cenotaph to be erected on a site on the plateau in front of St. George's Hall, Liverpool. Assessor, Professor C. H. Reilly, O.B.E. [*F.*] Premiums, £200, £150, £100, and £50. Last day for receiving designs 30 September 1926. Last day for questions 30 June 1926. Total cost £10,000. For conditions apply to Town Clerk, Municipal Buildings, Liverpool.

### PROPOSED SAFFRON HILL CEMETERY, LEICESTER.

The Corporation of Leicester invite qualified architects to submit plans, designs, and estimates for the laying out of the proposed New Cemetery with all necessary buildings. Assessor, Mr. H. V. Lanchester [*F.*] Premiums, £100, £50, and £25. Designs to be sent in not later than noon 12 July 1926. Particulars from the City Surveyor. Deposit £1.

### BEACH IMPROVEMENT SCHEME, ABERDEEN.

The Town Council of Aberdeen invite architects to submit competitive designs for the proposed buildings to be erected at the sea beach, Aberdeen. Assessor, Mr. John Keppie [*F.*], President of the Incorporation of Architects in Scotland. Designs to be sent in not later than 28 June 1926. Conditions may be obtained from A. B. Gardner, Director of Housing, Town House, Aberdeen.

### COUNCIL OFFICES AND FIRE STATION, PURLEY.

The President of the Royal Institute of British Architects has nominated Mr. P. D. Hepworth, F.R.I.B.A., as Assessor in this competition.

### RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

### BROMSGROVE RURAL DISTRICT HOUSING COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

### SCHEME FOR BUILDING LARGE RESIDENCES, CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competition.

### MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

### LEAGUE OF NATIONS.

**COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.**

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for



sum of 20 Swiss francs, payable in advance, but will be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

The President of the R.I.B.A. has been informed by the Secretary of State for Foreign Affairs that the competition in connection with the above will open on 25 July 1926.

One hundred and fifty copies of the programme of the competition will be forwarded to the R.I.B.A. as soon as they are received from Geneva.

#### AUSTRALIAN NATIONAL WAR MEMORIAL AT VILLERS BRETONNEUX

The date for the submission of designs in the above competition has been further extended from 31 May to 1 July 1926.

#### SCOTTISH LEGAL LIFE ASSURANCE SOCIETY: NEW AND ENLARGED PREMISES.

The President of the Royal Institute of British Architects has nominated Mr. John Keppie, A.R.S.A., R.I.B.A., as Assessor in this competition.

## Members' Column

#### PARTNERSHIPS WANTED.

R.I.B.A., aged 36 years, desires partnership, or position with view to partnership, in London or South of England. Small capital available. Is energetic and unafraid of work. Can commence immediately.—Apply Box 1646, c/o The Secretary, R.I.B.A., Conduit Street, London, W.1.

R.I.B.A., age 42, requires Junior Partnership or position of architect with view to same with good established firm of Architects in London or South. First-class London experience. Small capital available. Keen and active.—Reply Box 6244, c/o The Secretary, R.I.B.A., 9 Conduit Street, W.1.

#### APPOINTMENT WANTED.

R.I.B.A. desires position or partnership preferably abroad. Has had experience of English County education and Colonial Government work, and has managed for the last three years a general practice abroad. Competitions, working drawings, quantities and supervision, used to construction in reinforced concrete. Photographs of work can be seen on application at the R.I.B.A.—Reply Box 2232, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

#### MR. WRAY WHESTON [L.]

Mr. Wray Whiston [L.] has rejoined Mr. E. Arden Minty [F.], No. 47 Victoria Street, Westminster.

#### TRADE CATALOGUES.

Mr. CLAUDE J. W. MESSENT [A.] has started practice at Burlington Buildings, Orford Place, Norwich, and will be pleased to receive trade catalogues.

#### FOR SALE.

FOR SALE.—Office Fittings—10 ft. sloping drawing desk with three plan drawers; 7 ft. 6 in. painted plan case with drawers, top cupboard, washstand and open bookshelves over; 6 ft. 6 in. partition with dwarf swing door.—J. Rawlinson, 11 Adam Street, Adelphi, W.C.2.

#### ROOM TO LET.

ARCHITECT (F.R.I.B.A.) wishes to let large room adjoining Coln's Inn, rent £70 per annum, inclusive of light and heating fitted drawing table.—Reply Box 5331, c/o Secretary, R.I.B.A., Conduit Street, W.1.

## Minutes XIV

SESSION 1925-1926.

At the Fourteenth General Meeting (Business) of the Session 1925-1926, held on Monday, 14 June 1926, at 8 p.m., Sir Banister F. Fletcher, Vice-President, in the Chair. The attendance book was signed by 12 Fellows (including seven members of the Council), six Associates (including one member of the Council), and six Licentiates (including one member of the Council).

The Minutes of the Annual General Meeting held on 3 May 1926 having been published in the Journal, were taken as read, confirmed and signed by the Chairman.

The Hon. Secretary announced the decease of the following members:—

Mr. John Cash, elected Fellow 1901,  
Mr. J. Gaff Gillespie, elected Fellow 1906,  
Mr. P. B. Houfton, transferred to Fellowship 1925,  
Mr. Henry Lord, elected Fellow 1888,  
Mr. T. B. Whinney, elected Associate 1884, Fellow 1901,  
Mr. J. B. Cohen, elected Associate 1872,  
Mr. Frank Fox, elected Associate 1888,  
Mr. Alexander McWilliam, elected Associate 1922,  
Mr. P. Rider Smith, elected Associate 1896,

and on the motion of the Hon. Secretary, it was RESOLVED that the regrets of the Institute for the loss of these members be entered on the minutes and that a message of sympathy and condolence be conveyed to their relatives.

The following members attending for the first time since their election or transfer were formally admitted by the Chairman:—

Henry Branch [F].  
E. J. W. Hider [F].  
A. G. Wilkinson [F].  
H. Andrew [A].

The following candidates were elected to membership by show of hands under Bye-Law 10:—

#### AS FELLOWS (39).

ANDREW: HARRY [A. 1915], Hull.  
BARKER: PHILIP EDWARD [A. 1888], Manchester.  
BATES: ERNEST [A. 1904].  
BESWICK: ALFRED EDWARD [A. 1909], Swindon.  
CASTELLO: MANUEL NUNES [A. 1904].  
DURAND: ARTHUR HENRY [A. 1921].  
GEE: ERNEST [A. 1916], Liverpool.  
GUTTERIDGE: LT.-COL. REGINALD FOWLER, T.D. [A. 1909], Southampton.  
HARRILD: FRED, M.A. Oxon [A. 1922], Totnes, S. Devon.  
HOLDEN: WALTER FREDERICK CLARKE, M.C. [A. 1922], Beaconsfield.  
KENNEDY: EDWIN RIDDELL [A. 1906], Belfast.  
MINTY: JAMES ANDREW [A., 1901].  
WALKER: FREDERICK ARTHUR [A. 1921], Shanghai, China.  
WEARING: STANLEY JOHN [A. 1907], Norwich.  
WOODS: FRANK [A. 1910], Maidenhead.

And the following Licentiates, who are qualified under Section IV, Clause C (ii), of the Supplemental Charter of 1925:—

BALL: CHARLES WILLIAM, F.S.I., Southsea.  
BERRY: JOSEPH, J.P., Huddersfield.  
BOTTOMLEY: JOHN MITCHELL, Ramsey, Isle of Man.  
FISHER: FRANK JAMES.  
HAVERS: ALBERT CHARLES, Norwich.  
KEMPSTER: FRED.  
LONG: ALFRED, J.P., West Bromwich.  
SHENTON: FREDERICK WILLIAM.

And the following Licentiates who have passed the qualifying Examination :—

BELSHER : BERNARD JAMES, M.Inst.C.E.  
 BOND : JOHN OWEN, Norwich.  
 CLARE : GEORGE EDWARD.  
 DAVIDSON : WILLIAM, Edinburgh.  
 EASTON : COL. ARTHUR, T.D., Hull.  
 FORGE : FREDERICK LINDUS.  
 HAYNES : FREDERICK STANLEY.  
 HILL : THOMAS JACKSON, Oldham.  
 JOHNSTON : JOSEPH MARR, Leith.  
 LAMB : PERCY AIDAN.  
 LUMB : FRANCIS LEONARD, Blackpool.  
 MUNDEN : PATRICK JOHN FITZGERALD, Dublin.  
 SANDERS : INGALTON, Southampton.  
 SOUTAR : JOHN CARRICK STUART.  
 TAYLOR : SAMUEL, Burnley.  
 WEEKES : JOSEPH, Dumbarton.

#### AS ASSOCIATES (16).

ALABASTER : JOHN RICHARD [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice].  
 ALLEN : ALFRED MAXWELL [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 BRADDOCK : HENRY [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 HOLLINSHED : CHARLES NEVILLE [Special], New York, U.S.A.  
 LLEWELLYN-MORGAN : GUY [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice].  
 LORD : WILFRID TURNER, B.A. Cantab [Final].  
 MCCONNELL : KENNETH HAMLYN, B.Arch. Sydney [Passed five years' course at Sydney University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice].  
 MARTIN : GEORGE LEGAT, Junr. [Final], Seaham Harbour.  
 MARTIN-SMITH : DONALD FRANK [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 MORRIS : ALEXANDER GEORGE [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Swindon.  
 MOSELY : EDNA [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 PRESTON : FREDERICK LESLIE [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 RITCHIE : THOMAS [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 ROSCOE : FRANK, Junr. [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].  
 STEWART : ALEXANDER MALCOLM [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], Inverness.  
 WOOD : JOHN WILLIAM [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].

#### AS HON. ASSOCIATES (2).

BELL : ROBERT ANNING, R.A., R.W.S., R.B.C., Hon. LL.D.  
 MACKAIL : JOHN WILLIAM, M.A., LL.D., F.B.A.

#### AS HON. CORRESPONDING MEMBER (1).

DEFRASSE : ALPHONSE, Inspecteur Général des Bâtiments Civils et des Palais Nationales, Architecte en Chef de Banque de France, Paris (6<sup>e</sup>), France.

The Scrutineers' Reports, giving the results of the Annual Elections of the Council, the Standing Committees, and the Hon. Auditors were read. The Chairman declared the officers, members of Council, the Standing Committee and the Hon. Auditors duly elected in accordance therewith.

On the motion of the Chairman a vote of thanks was passed by acclamation to the Scrutineers for their labours in connection with the elections. The proceedings closed 8.15 p.m.

## Minutes XV

SESSION 1925-1926.

At the Fifteenth General Meeting (Ordinary) of the Session 1925-1926, held on Monday, 21 June, 1926, Mr. E. G. Dawber, F.S.A., President, in the chair.

The attendance book was signed by 21 Fellows (including 11 members of the Council), 12 Associates (including 2 members of the Council), 6 Licentiates and 1 Hon. Associate, and a number of visitors.

The Minutes of the Business Meeting held on 14 June 1926 were taken as read, confirmed, and signed by the President.

The Hon. Secretary announced the decease of :—

Robert Cuningham Murray, elected Fellow 1907.

And it was Resolved that the regrets of the Institute for his loss be entered on the Minutes, and that a message of sympathy and condolence be conveyed to his relatives.

The following Members attending for the first time since their election were formally admitted by the President :

Mr. Ernest Bates [F.].

Mr. F. S. Webber [F.].

Mr. H. McGregor Wood [A.].

Mr. E. A. Collett [L.].

Mr. H. S. Goodhart-Rendel [F.], having read a paper on "The Work of the late Sir Thomas Graham Jackson, R.A." a discussion ensued, and on the motion of Mr. Arthur Kee Vice-President, seconded by Mr. Basil H. Jackson [A.], a vote of thanks was passed to Mr. Goodhart-Rendel by acclamation, and was briefly responded to.

The meeting closed at 9.15 p.m.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to the method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

#### R.I.B.A. JOURNAL.

Dates of Publication.—1926 : 17th July ; 14th August ; 18th September ; 16th October.



# Journal of the Royal Institute of British Architects

VOL. XXXIII. No. 17

THIRD SERIES

17 JULY 1926

## Contents for 17 July 1926

	Page
SKETCH FOR DECORATION OF STAIRCASE. By Sir T. Thornhill .. .. .	499
AN ARCHITECTURAL HISTORY OF THE BANK OF ENGLAND. Part. I. By H. Rooksby Steele .. .. .	499
STONE DECAY AND PRESERVATION OF ANCIENT BUILDINGS. Part II. By Professor A. P. Laurie .. .. .	512
REVIEW :	
EAST CHRISTIAN ART. By William Harvey .. .. .	514
MR. NEVILLE CHAMBERLAIN ON HOUSING. By Professor S. D. Adshead .. .. .	515
CORRESPONDENCE :	
SCALE OF CHARGES. By Wilfred Travers, Jain MacGill-Eathain, A. H. M. Brice, W. E. Watson, Courtenay M. Crickmer	516-8
HISTORY OF THE SOCIETY OF ARCHITECTS. By C. McArthur Butler .. .. .	518
BIRTHDAY HONOURS :	
SIR HERBERT BAKER .. .. .	518
SIR ANDREW T. TAYLOR .. .. .	518
PROPOSED MEMORIAL TO SIR CHRISTOPHER WREN .. .. .	519
ALLIED SOCIETIES : THE ASSOCIATION OF TRANSVAAL ARCHITECTS .. .. .	519
OBITUARY :	
MISS GERTRUDE L. BELL .. .. .	520
R. C. MURRAY .. .. .	520
J. G. GILLESPIE .. .. .	520
SCIENCE COMMITTEE : BUILDING SCIENCE ABSTRACTS .. .. .	520
BOARD OF ARCHITECTURAL EDUCATION :	
CONFERENCE OF TEACHERS OF BUILDING .. .. .	520
R.I.B.A. MAINTENANCE SCHOLARSHIPS.. .. .	521
ROME SCHOLARSHIP .. .. .	521
NOTES FROM MINUTES OF COUNCIL .. .. .	521-2
NOTICES .. .. .	522
COMPETITIONS .. .. .	523
LIMITED COMPETITIONS .. .. .	523
MEMBERS' COLUMN .. .. .	524
B.S. SCHEME OF INSURANCE .. .. .	524
R	







FIG. 1.—THE THREE HOMES OF THE BANK OF ENGLAND  
From John Ogilby's Map of London, published 1677

# An Architectural History of the Bank of England

BY H. ROOKSBY STEELE [A.].

## CHAPTER I.

### THE BIRTH OF THE BANK.

TO the average person who takes an interest in the institutions and buildings of London, the question: "Who built the Bank of England?" would conjure up the name of Sir John Soane. There is some excuse for this answer, for the general public sees no more of the Bank than the girdling walls of Soane—save an occasional glimpse into the mysterious interior through the infrequent doorways—and is all unaware that within is to be found the work of other architects, less renowned perhaps than the Wizard of Lincoln's Inn Fields, but surely none the less deserving of our notice when we are considering the history of the Bank from an architectural standpoint. Besides that of Soane there are three names linked with the development of the fabric of the Bank—those of Sampson, Taylor and Cockerell. To the first belongs the credit of creating the nucleus around which his successors have woven their fancy; to the second we are indebted for the heart of the Bank, the Court Room and Garden; and to the third, Cockerell, who followed Soane upon his retirement, we must give our meed of praise for the skilful way in which he carried out the raising of Soane's attic in the troublous times of '48.

Before passing on to a detailed description of the work of the above four men, it would be well to give here a brief account of the origin of the Bank as a financial institution as apart from a structure of archæological interest.

In the early part of the reign of William of Orange—the Dutch king who followed James II on the throne of England—this country was engaged in a fierce struggle with Louis XIV of France. The Government—formed of Whigs, the party that had been instrumental in inviting William over here—were in a weak position politically, and found themselves unable to raise the large sums necessary to finance the armies overseas, despite a land tax of four shillings in the pound and other imposts. In 1691 a Scot, William Paterson, in collaboration with Michael Godfrey, a City merchant, proposed to the Government a scheme whereby the deficit in the National Exchequer might be met. The proposal was not adopted forthwith; but in 1694, all other means having failed, it was decided that the time had come when it should be put into operation. In effect this was the foundation of the National Debt, for the Government was to borrow large sums of money on which it would guarantee interest but would not promise to repay the Principal.

A great loan of £1,200,000 was raised in this manner by public subscription between the dates 21 June and 2 July 1694, and a company, entitled "The Governor and Company of the Bank of England," was formed, with Sir John Houblon, a prominent merchant and Whig, at its head; Godfrey as Deputy Governor; and twenty-four others as directors. Among the latter William Paterson was numbered, but he seems to have dropped out within a twelvemonth owing to differences with his colleagues. The constitution of the Bank has



FIG. 2.—ENTRANCE TO MERCERS' HALL AND CHAPEL  
Removed at the widening of Cheapside in 1882 and re-erected at Swanage Town Hall



FIG. 3.—GROCERS' HALL  
As rebuilt after the Great Fire. Pulled down in 1798



remained unaltered to the present day, except for the addition, in 1918, of a permanent official, the Comptroller.

Adam Smith gives the date of the incorporation of the Bank as 27 July 1694. Mercers' Hall, Cheapside (Figs. 1 and 2), was used at the outset as an office and for meetings of the Court, but before the end of the year (during the fortnight 17 to 31 December, as the Minutes show) the business was transferred to the Grocers' Hall, in Poultry (Figs. 1 and 3), a move which was due,

which had to be separately acquired in order to produce a site with adequate frontage to the street (Fig. 1). It is clear, from the fact of this second purchase, that the Directors had no intention of converting Houblon's house to their requirements, but contemplated a clearance of the whole area to enable them to build anew. The latter course was, as we know, adopted, and Francis, in his "History of the Bank of England," records that on 20 January 1732 it was resolved to erect a Hall



FIG. 4.—1735. SAMPSON'S BANK  
Plan prepared by Cockerell to illustrate the development of the Bank

no doubt, to the influence of Houblon, for this company, of which he was a member, was at the time in low water.

Thirty years later, in 1724, the increasing business and importance of the Bank caused the directors to feel he need for a more permanent and more suitable location for their activities than was furnished by the Grocers' Hall, and so the purchase of Houblon's house in Threadneedle Street was effected for £15,000. (The first Governor of the Bank had died some twelve years previously at the age of eighty.) This transaction did not give the Bank all they desired, for the house and its courts did not lie directly on Threadneedle Street but were approached from it up an alley between office buildings,

and offices on the site. He gives Dunn and Townshend as the contractors and Mr. George Sampson as the architect selected for the carrying out of the work.

## CHAPTER II.

### THE FIRST ARCHITECT—GEORGE SAMPSON.

It is a curious thing about Sampson that no building, other than the Bank of England, can be attributed to his hand. There are no records in the libraries of the Institute, the British Museum, or the Guildhall which throw any light upon his activities apart from the designing of the original Bank. We may take it that he was

one of the many skilled masons of that time, and by some chance was fortunate enough to attract the attention of the Bank Directors.

The site having been cleared and Sampson's plans brought to maturity, the foundation stone (in the base of one of the columns of the still existing Pay Hall) was laid on 3 August 1732 by Sir Edward Bellamy, Governor. The contract—amounting to £13,153 7s. 9d., with the use of old materials on the site—was not signed, however, till 6 October in the same year, and provided for completion within a twelvemonth.

Sampson made full use, in his lay-out, of the space available (Fig. 4). It will be seen that this was deep and narrow, with a distinct bend in the length, the following of which gave rise to a distortion of plan which

ingredients which made up its whole were in accordance with the recipe of the Italian school—a bold rusticated basement supporting an order running through two storeys, with a rich entablature carrying a parapet adorned with massive stone vases. It is questionable whether such an imposing façade as Sampson produced was not a little overpowering in a street barely twenty-five feet wide at this time. The architect divided his frontage of eighty feet into seven bays, the middle three set forward two feet in advance of the general line and accommodating in the "basement" the three entrances which led, by vaulted passages thirty feet long, to the courtyard within. To mark the centre bay this was made wider than the rest—thirteen feet centre to centre as compared with ten feet six inches in the flanking bays—and further



FIG. 5.—SOUTH FRONT OF THE BANK

A drawing by T. H. Shepherd, published in 1816, showing Sampson's centre and Taylor's flanking wings

his successors could not escape. The proximity of adjacent buildings and the natural desire of the Directors for security and privacy in their new home dictated a plan with internal light wells, the only windows to the outer world permitted being in the street front and overlooking St. Christopher's Churchyard, which lay to the westward. This principle has held throughout the many subsequent enlargements of the premises and gives to the present building an air of somnolence and detachment which entirely belies the activity within.

The focus of the plan was undoubtedly the great Hall, but to the ordinary beholder—who has no use for plans, and only wants to see the picture—the façade in Threadneedle Street would be the chief feature of the Bank (Fig. 5).

This was essentially Palladian in character: all the

its entrance was broader and higher than those on each side, whilst the window over it at first floor level was given a semi-circular head supported on a small Ionic order, whereas the remaining windows on this floor were content with the normal architrave and pediment.

From the plain string-course which surmounted the "basement" rose the two-storeyed Ionic order, four three-quarter columns being used in the centre over the projecting entrances and pilasters for the rest of the front. The capitals of both columns and pilasters had the volutes turned outwards to meet volutes on the return faces. A three-stepped architrave, pulvinated frieze and cornice supported on modillions completed the order. Over all was the parapet—a severe affair, but enlivened with its vases.

The north side of this building was a replica of the south, except that the central projection was omitted and



pilasters were utilised right along the face (Fig. 6). It is existing at the present time: the only alteration from the original design being a lowering of the cills of the top windows, converting the openings from the square into the oblong. The west and east sides of the front building were encumbered with large chimney-stacks, which, judging from old prints and allowing for the usual licence of draughtsmen in those days, appear to have passed through astonishing metamorphoses in form.

bays but in a different manner, for with the centre bay as the widest he diminished the flanking bays on each side in arithmetical progression till the outer bays were only three-quarters, centre to centre, of that on the main axis of the site. Further, there was no "basement": four massive unfluted three-quarter columns of the Corinthian order, embracing the middle three bays, reared themselves upon Attic bases from a shallow podium. The remainder of the elevation had neither column nor pilaster to relieve it.



FIG. 6.—THE FRONT COURTYARD  
The north wall of Sampson's entrance block as now existing

The change in the direction of the site was masked by walls of unequal length at the narrower ends of the front courtyard. They were blank arcades carrying round the treatment of the "basement" storey of the front block, and sufficiently far apart to prevent their unequalness being perceived in one *coup d'œil*. To their northern extremities the great Hall was attached, a magnificent room 73 feet long by nearly 40 broad, where the general transactions with the public were carried out.

In dealing with its exterior to the courtyard (Fig. 7), Sampson departed almost entirely from the scheme of the entrance block. It is true he divided the front into seven

A simple entablature with modillioned cornice extended the full width of the building breaking over the columns into a pediment, in the tympanum of which Taylor, some years after the completion of the building, sculptured an excellent figure of Britannia. This carving, the "trade-mark" of the Bank, and probably the inspiration for that trite appellation, the "Old Lady of Threadneedle Street," gives, in its delicacy of poise and masterly execution and against the somewhat coarse setting of Sampson's design, a foretaste of the greater refinement which Taylor was to bring to bear upon the architecture of the Bank.

On either side of the pediment a balustrade surmounted the entablature. Two ranges of windows lit the interior of the Hall, and entrance to it was gained by a central doorway with rounded head. Except that this doorway has since been converted to a rectangular shape, with pediment over, like the windows on each side of it, the exterior still remains as built. Inside, Ionic pilasters, starting from a slightly projecting base at the level of the lower window-cills, carried a full entablature, from which sprang a cove

At the west end of the Hall was a large window of Venetian pattern giving on to the Churchyard of St. Christopher, and responding to it at the east end was a recess of similar design, in which has stood since 1734 a marble statue, by Cheere, of William III in Roman garb.

Behind the Hall Sampson covered the remainder of the site with buildings of a more modest character, grouping them round a second court, which occupied the same position as the present Bullion Yard of Soane's. From this



FIG. 7.—THE FRONT COURTYARD

The exterior of Sampson's Pay Hall, with a screen wall by Taylor on the left

to support the flat ceiling. The latter was found to be in a dangerous state in the middle of last century through the timbers having rotted, and was removed, a large glass skylight taking its place. Another and more drastic operation was performed during the Great War, when a bomb-proof floor was inserted on a level with the heads of the lower range of windows. (It was given out at the time, to allay the somewhat natural apprehension of the staff, that this unsightly erection was merely an ingenious method of gaining much-needed additional floor space!)

court a passage led eastward to Bartholomew Lane, passing the Ship Tavern en route, a circumstance no doubt highly commendable to the clerks of the period. Much of these rear premises is still traceable in the basement, embodied in the later works of Taylor and Soane.

On Thursday, 5 June 1734, the first business was transacted in the new Bank. Sampson probably gave his services for a time in maintaining the structure and carrying out minor internal works, but there is no definite record of this.



## CHAPTER III.

## THE SECOND ARCHITECT—SIR ROBERT TAYLOR, 1714-1788.

For 31 years Sampson's building sufficed for the requirements of the Directors, though the possible need for extensions led them gradually to acquire the property on their eastern boundary extending as far as Bartholomew Lane. By 1765 an area somewhat larger than that they

boundary was not in line with Sampson's front. Taylor had the foresight to remedy this by continuing the line of the earlier work and giving up a certain amount of ground "to the public use," and further, in designing his return face to Bartholomew Lane, which was also off the square, he gave up still more ground in the endeavour to achieve rectangularity in his plan. That his setting-out was not entirely successful has been proved by recent survey,



FIG. 8.—1770. TAYLOR'S FIRST ADDITIONS  
Plan prepared by Cockerell to illustrate the development of the Bank

already occupied had come into their hands, including the Crown Tavern and the original Sun Fire Office, and fresh building operations were decided on and entrusted to the hands of Robert Taylor. He had definitely forsaken sculpture for architecture in 1756, when his first essay in the mother art—Stone Buildings, Lincoln's Inn—was erected. His practice was considerable at the time of his appointment as Bank architect and he had already many banking houses in the City to his credit.

The new site was approximately a square (Fig. 8). Owing to the bend in Threadneedle Street the southern

which gives an angle of  $91^{\circ}-8'-28''$  between the building lines of the two streets.

The dominating feature of Taylor's new buildings was the Rotunda (Fig. 9), which he placed almost in the centre of the plan. Based on the Pantheon at Rome, which he had seen and admired during a visit to that city in his younger days, it was a circular hall nearly 62 feet in diameter with eight pairs of three-quarter Corinthian columns on pedestals spaced round its perimeter. Between the pairs of columns were alternately semicircular and flat recesses, the rounded heads of which gave support to the

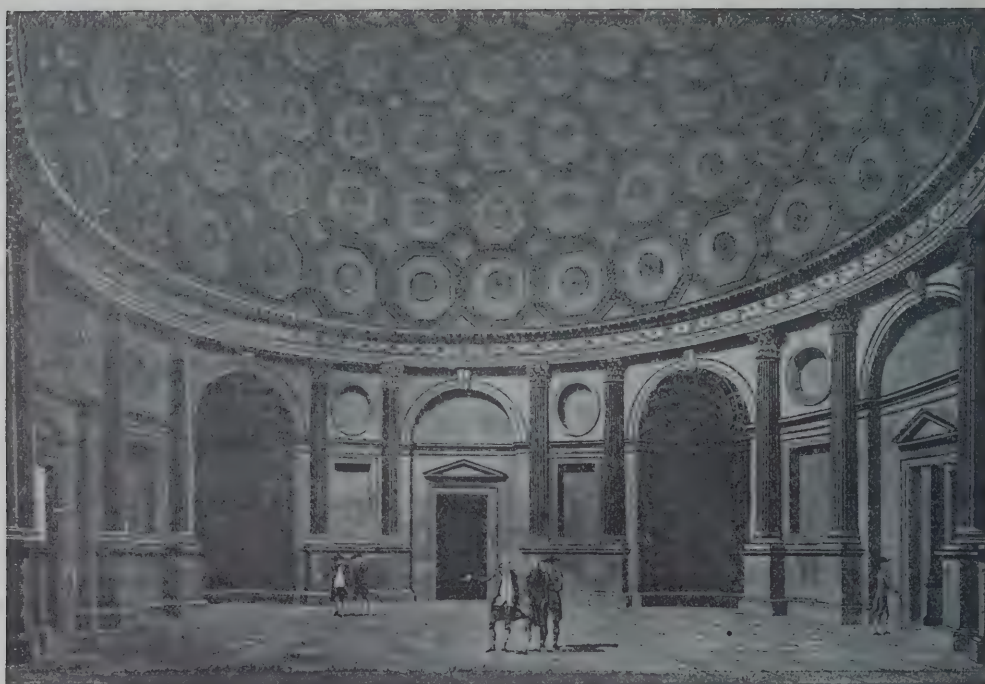


FIG. 9.—TAYLOR'S ROTUNDA

Drawn by T. Malton. The coffered dome was of lath and plaster on timber framing, and was condemned by Soane in 1795 under his policy of fireproof reconstruction

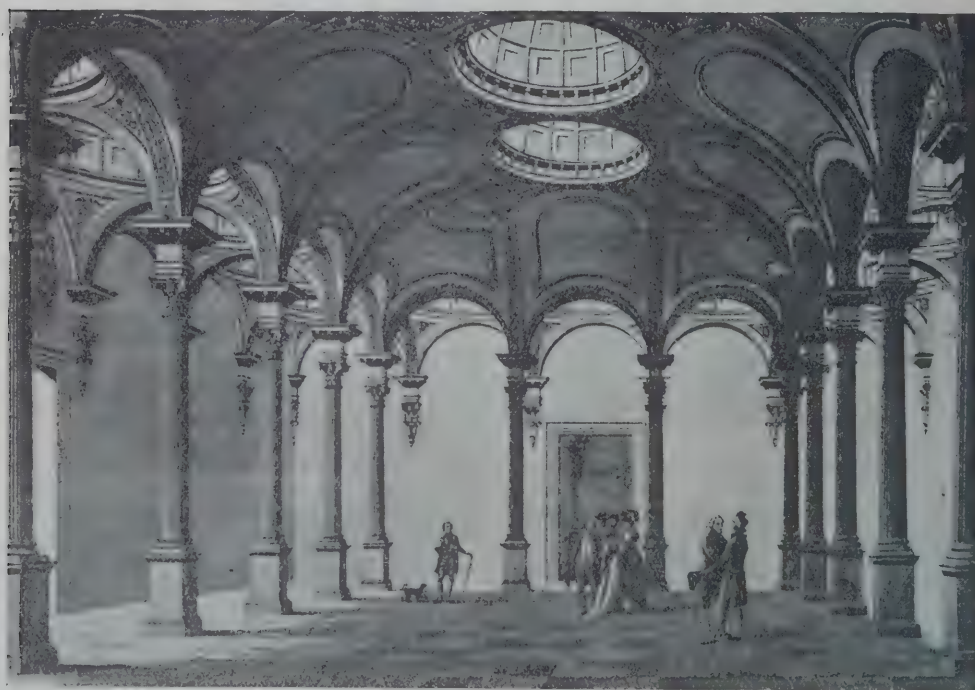


FIG. 10.—TAYLOR'S TRANSFER OFFICE

Drawn by T. Malton. One of four identical halls adjoining the Rotunda. The columns were of wood and the vaulting of lath and plaster





FIG. 11.—THE SOUTH FRONT IN 1790

By T. Malton. The Taylor screen wall in the foreground was erected on the site of St. Christopher-le-Stocks, demolished in 1781



FIG. 12.—THREADNEEDLE STREET AND CORNHILL

Bank Buildings, by Taylor, between the two thoroughfares. The old Royal Exchange, showing behind, was burnt down in 1838

entablature. From the latter sprang a great coffered dome rising to a height of 61 feet above the floor, with an eye, 15 feet in diameter covered with a lantern, as the sole source of light to the interior.

To the north, south and east of the Rotunda, Taylor disposed four vaulted halls, all exactly alike in design and dimensions (Fig. 10). Each was about 65 by 45 feet on plan: a range of columns, six in the length and four in the breadth, formed a continuous aisle round the sides and helped to support the intricately-vaulted ceiling. Over each bay of the aisles and over three divisions of the central part were domes, partly glazed. The treatment was a direct copy of Gibbs's church, St. Martin-in-the-Fields: in fact, Taylor borrowed shamelessly from all sources in designing his contributions to the Bank.

Between the Rotunda and the Front Courtyard he placed a Vestibule, having on its south side a large strong-room and on its north side the Treasury. The latter, which is still intact, is interesting for the fact that its ceiling, comprising a barrel vault at each end with coffered dome between, was constructed in stone, whereas the ceilings of the Rotunda and its surrounding halls were framed up in timber with lath and plaster finish internally. Between the two halls, lying to the east of the Rotunda, Taylor interposed another vestibule, which led out into Bartholomew Lane. It had a lath and plaster semi-dome at its east and west ends with a wooden coffered dome between, bearing a striking resemblance, in treatment, to the Treasury.

The Directors were still averse to piercing the outer walls with openings for light: Taylor's scheme for top-lighting all his halls suited them admirably, for not only was the method productive of well-diffused illumination, but saved useful floor space in not requiring internal areas. The columns of the four main halls rested on brick piers below the floor, the piers being connected with inverted arches to spread the weight on to the continuous foundation necessary on the marshy bottom. The arches, rather indifferently formed, were left intact by Soane, who incorporated them in his more robust understructure.

To complete his design it was necessary for Taylor to clothe his halls on the street sides with a blank wall (Fig. 11). Applying himself once more to that wonderful storehouse, the architecture of Italy, he chose Bramante's garden front in the Pope's palace as a model. In its natural surroundings this was undoubtedly an excellent piece of work, but, adapted to its present use, it became far from satisfactory. Contrasted with Sampson's bold elevation it was poor in scale and altogether of too flimsy an appearance to give that feeling of security one associates with a great banking institution. In extenuation it might be argued that Taylor contemplated the ultimate effacement of Sampson's work, with a substitution of his own design in the entrance block, and further it must be recorded that, on the opposite side of Threadneedle Street, Taylor had just built Bank Buildings in a style with which his new Bank wall was in harmony (Fig. 12).

The new wall consisted of a series of arched recesses, separated by pairs of Corinthian columns on pedestals with an orthodox entablature and balustrade over. At each end of the two street frontages pavilions were formed by breaking forward the entablature over an extra row of

columns and substituting a pediment and parapet for the balustrade. The treatment bore no relation to the internal planning except where the entrance vestibule in Bartholomew Lane demanded it. The west end of the main front was connected to Sampson's façade by a short set-back wall, a curious blend of both styles and capped by a giant scroll reminiscent of the end of a Renaissance Church.

Taylor's first extensions were completed in 1770 by a new gateway in Bartholomew Lane, partly on the site of the Ship Tavern, and leading to the passage already referred to, and by the replacement of the east wall of Sampson's front courtyard with a loftier screen which showed a rare touch of originality in the honeysuckle band which traversed it near the top. A stereotyped doorway in the centre gave access to the Rotunda and other halls. This wall, still standing, is often erroneously attributed to Soane.

The Bank had meanwhile been acquiring fresh property around them, perhaps with the idea of ultimately owning and occupying the whole island site bounded by Threadneedle Street, Bartholomew Lane, Lothbury and Princes Street. In 1765 they had authority to purchase the Rectory and Glebe of St. Christopher's; later they obtained possession of premises to the north of Sampson's work, and so the way was paved for further extensions by Taylor in 1774 (Fig. 13). The chief of these was the Court and Committee Room Suite on the site of the Rectory and Glebe. The two main rooms of this suite were placed on the axis of the rooms lying directly behind Sampson's Hall and consequently were not square with the main front of the Bank. This was the first instance of the influence of the "twist" in the original plan.

The Court Room, intended to be used for the weekly meetings of the Directors, was indeed a magnificent apartment (Fig. 14). Thirty-two feet wide and 62 feet long, including the end vaulted aisles, it had a height of 23½ feet to the richly-decorated flat ceiling. It was lit by three large windows of Venetian pattern in the south wall, overlooking St. Christopher's Churchyard. In the north wall responding to the windows were three shallow arched recesses, in each of which the architect prodigally set a fireplace. The vaulted aisle, or rather narthex, at each end was divided from the main part of the room by a triple arcade on Corinthian columns, which were of wood.

At the west end of the Court Room and communicating with it was the Committee Room, with a single window giving on to the Churchyard. Both these rooms are in use in their original capacity at the present time; their wall decoration was subjected to unnecessary change in the days of Cockerell, and at the same period large sheets of plate glass ousted the smaller panes from the windows. A noticeable fault of the latter "improvement" is that the cornices of the sub-order now present their naked sections to the gaze on either side of the glass, whereas in the original design a deep wooden transome provided an efficient stop.

In his treatment of the outside of the south wall of the Court and Committee Rooms, Taylor was reduced to a somewhat questionable expedient. On reference to the plan (Fig. 13) it will be seen that externally the wall is divided by columns into five bays. The second bay from



the west abuts on the division wall between the two rooms, and in seeking to preserve the uniformity of the façade the architect was forced to place a window in this bay which could give light to neither room. The sham has been successfully masked from without by painting the glass black on the inside. Soane, later, perpetrated the same illusion with one of his windows in the Governor's Courtyard.

Of the same period as the Court and Committee Rooms

It was quite an extensive building—a double-square, 72 by 36 feet on plan—consisting of four storeys identical in design, each storey having two rows of six piers down the middle, supporting, with the four walls, the cross-vaulted brick ceiling. Semi-circular headed windows were placed wherever possible in the outer walls and an attached staircase at the west end gave inter-communication between the different floors and the Courtyard leading to the older buildings.



FIG. 13.—1778. TAYLOR'S WORK COMPLETED  
Plan prepared by Cockerell to illustrate the development of the Bank

were others lying directly to the north of them, for the Governor and Deputy (with waiting rooms adjoining) and Discount and Chancery Offices, all top-lit and communicating with one another by two corridors at right angles, which met in a square vestibule at the north-east corner of the Courtroom. Of these, the vestibule—mostly wood and lath and plaster—is the sole survivor, though two octagonally-shaped brick vaults which were under two of the eight-sided waiting rooms fulfil the duty of coal cellars at the present time.

The new site behind Sampson's work was devoted to a "Library" for the storage of ledgers and documents.

In 1780 the episode of the Gordon Riots led the Directors to fear that the Church of St. Christopher-le-Stocks might lend itself as a dangerous vantage point for the mob in the event of further disturbances threatening the security of the Bank. Parliamentary powers to purchase the fabric were obtained and during the next year it was pulled down. At the same time property adjoining the west end of the church and extending up the lower half of old Princes Street was purchased and cleared away, making room for Taylor's final extensions.

On the new front to Threadneedle Street, which was almost exactly of the same length as his first façade to the

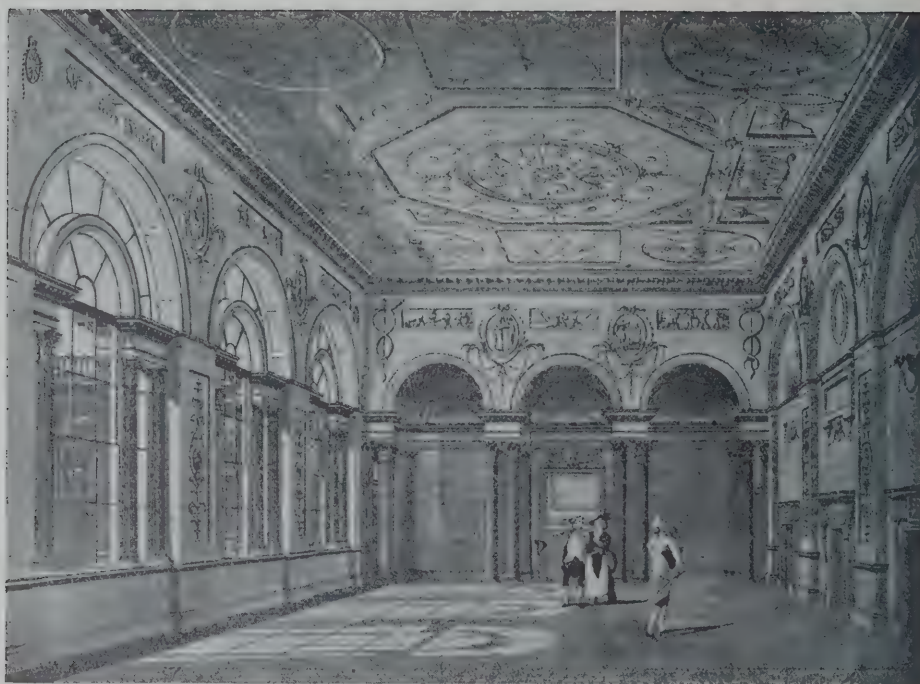


FIG. 14.—THE COURT ROOM

A Malton drawing. Built by Taylor in 1774, it remains, with slight decorative alterations, to the present day



FIG. 15.—REDUCED ANNUITY OFFICE

Built by Taylor in the angle between Threadneedle Street and Princes Street. Demolished in 1850



east of Sampson's front, he duplicated the screen-wall in its entirety, returning it down Princes Street to the bend with the pavilions at each end but with a blank treatment in between them. Behind these two walls new offices sprang up: connecting with the Front Courtyard was a Dividend Warrant Office and next this westward a Cheque Office—the latter necessitated by the recent introduction of the modern system of cheques which superseded the "goldsmiths' receipts." In the corner between the outer walls the Reduced Annuity Office was placed (Fig. 15). It was remarkable for the fact that Taylor here made use of the Roman Doric, whereas

to lend it shade and colour (Fig. 16). The graves were left untouched till 1867, when their contents were removed to Nunhead Cemetery for reburial. In completion of the Garden Court and new front offices, Taylor rebuilt the west wall of Sampson's Front Courtyard as a duplicate of that he had already erected at its east end (Fig. 7).

The last building for which Taylor was responsible was the Barracks, located to the west of the Court Room suite and occupying the angle at the bend in Princes Street. A barrack-yard separated the building from the outer wall of the Bank and gave an opportunity for free design in the front to the west, of which the only remaining



FIG. 16.—THE GARDEN COURT  
A modern view showing a window of Taylor's Court Room on the left and the end of Sampson's Pay Hall on the right

everywhere else in the Bank he was faithful to the Corinthian Order. The illustration shows, in the flat arches and large eye covered with a side-lit lantern, a distinct anticipation of Soane's design. Against the Princes Street wall to the north of this office a large spare room was provided.

It was one of the conditions in the consent to the pulling down of St. Christopher's that its churchyard could not be built over. Here was an opportunity not to be missed by the architect: Taylor saw his chance and applied to the walls of these four new offices over-arching the churchyard the Venetian window motif which he had employed seven years earlier in the south front of the Court and Committee Rooms. What might have remained a dull repository for the bones of the past became a noble Court with trees and shrubs and flowers

evidence is a doorway with rusticated treatment opening into a vaulted corridor leading to the Garden Court. The rest of the front was refaced by Soane and the interior remodelled by him and later architects. Part of the basement is still used as sleeping quarters for the nightly guard provided by the military.

In 1782 Taylor received the honour of knighthood, and six years later, at the age of 74, he died at the residence in Spring Gardens, which he held in virtue of his appointment as architect to the Admiralty. He left behind him at the Bank a mass of building covering an acre of precious City land; much of it was commonplace and sheer repetition—originality was not his forte—but some of it (like the Court Room and the Garden Order, which are still left to us) compels our admiration by its quiet repose and satisfying grandeur.

*(To be continued)*

# Stone Decay and the Preservation of Ancient Buildings

BY PROFESSOR A. P. LAURIE.

No. II.

In the first article I brought together evidence, from several different sources, of infection of sandstone and brick by lime from the mortar and consequent destruction.

We have, in the first place, the brick broken up on the surface by the crystallisation within it of sulphate of lime. To form the sulphate of lime, we require two materials, one, sulphuric acid in the air and rain from the burning of sulphur in coal, the other, lime in some form of combination.

In the case of a limestone or a calcareous sandstone, the lime is already there, but in the case of a pure clay brick or a pure silicious sandstone, the only source for large quantities of lime is the mortar or cement.

The acid containing air and rain penetrating the mortar and penetrating the brick or stone and soaking in until in contact with the mortar forms sulphate of lime, which is slightly soluble in water, and the solution of sulphate of lime has been drawn into and crystallises within the surface of the brick or stone. Such cases are rare and we have to ask ourselves why they only sometimes occur. The answer is to be found in a brick house near the brick building we have been considering, built with a different brick. In this building the bricks are sound but the mortar is covered with an efflorescence of sulphate of lime.

To understand these different results, let us consider what happens when the wall of a building has been soaked with rain and is then drying out.

We must not consider the stones or bricks alone but we must consider the whole surface of brick or stone and mortar to understand what will happen.

Let us suppose that when the building is drying out the water is evaporating faster from the mortar than from the brick or stone. In that case as shown by the arrow at A in the Diagram 1, water will be drawn from the low evaporating brick or stone to the quickly evaporating mortar, taking with it salts like sulphate of lime and depositing them in the mortar.

But if, as shown by the arrow at B, the stone or brick is evaporating faster than the mortar, water will be drawn from the mortar into the stone or brick, carrying with it salts like sulphate of lime and depositing them in the brick or stone.

We can easily test experimentally whether this is true.

Take, for instance, some little blocks of sandstone, say, 1 inch by 1 inch by 3 inches, and stand them upright in a shallow dish containing silicon ester and

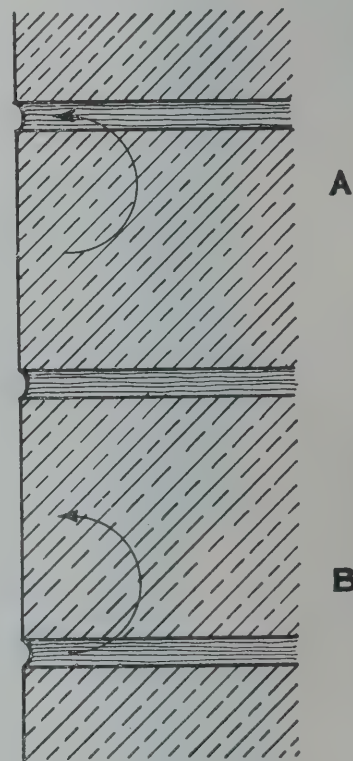


DIAGRAM 1.—SECTION OF WALL

allow the silicon ester to rise half way up the little blocks of stone and then take them out and allow them to dry.

The silicon ester decomposed by the moisture in the air deposits in the stone a cement of silica which makes the stone less porous. The treated end of such a brick or stone will evaporate more slowly than the untreated end and we can regulate the rate of evaporation as we please by further treatment with silicon ester.

In the case of the first stone, stand the silicon ester treated end in a shallow dish containing a salt solution. Let the salt solution be drawn up by capillary attraction until it has reached the untreated half, then reverse the stone, turning it over and placing the untreated end in a shallow dish of water until the water has risen to meet the salt solution. We now have the whole of the stone wet but the treated slowly evaporating end contains a salt solution and the untreated quickly evaporating end contains pure water.



(Diagram 2). Now let the stone dry. If our view is correct during drying, water containing salt will be drawn from the slow to the quickly evaporating end.

(Diagram 3). The photograph marked A shows that this is what happens. A salt capable of developing a dark red colour was used and the stone photographed after evaporation. During one evaporation the rush

during evaporation from this end to the slowly evaporating end.

It is evident, then, that there is a rush of water during evaporating from the slow to the quickly evaporating surface while a wall is drying out, carrying salts with it, and that we can control the direction of the flow as we like by treatment with silicon ester deposited in the pores as an indestructible cement.

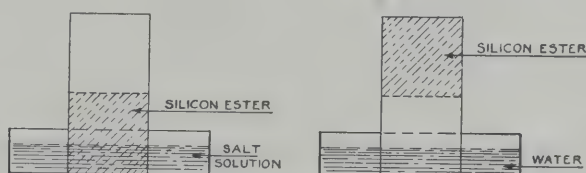


DIAGRAM 2

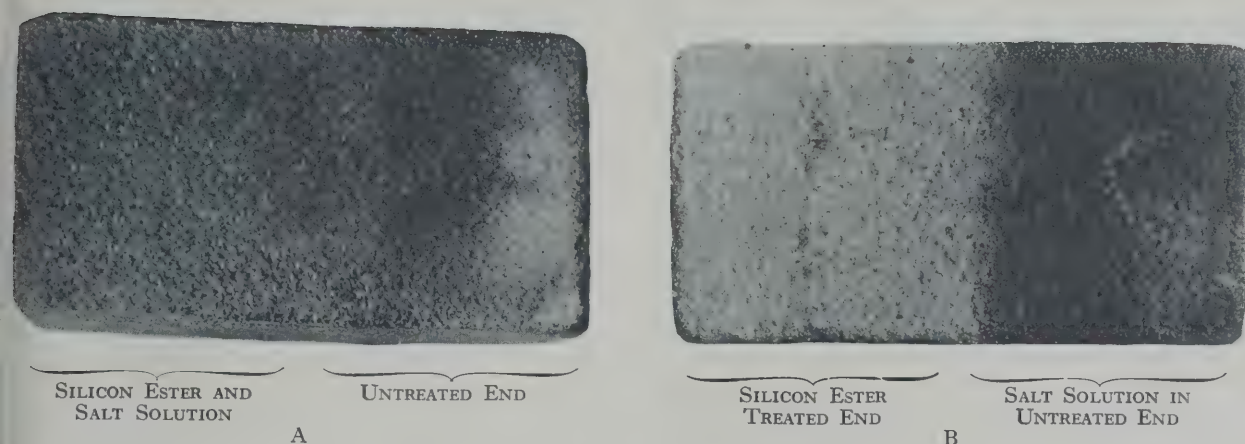


DIAGRAM 3

of water carrying salt from the slow to the quickly evaporating end has nearly reached the end of the stone.

We can now reverse the experiment with another of our little blocks of stone, one half of which has been treated with silicon ester. We now put the slow evaporating end in water and the quickly evaporating end in the salt solution and allow the stone to evaporate. The result is shown in photograph B. The dark end is the quickly evaporating end containing the salt. None of the salt has been transmitted

In the case of some of the buildings which I have been examining, one had been pointed with Portland cement and another with a mixture of Portland cement and lime.

It is easy, then, to understand why in these cases the brick or stone evaporated faster than the mortar and so water and salts were drawn into the brick or stone.

In the next article I shall discuss the practical application of these results in the preservation of ancient buildings of brick or stone.

## East Christian Art\*

BY WILLIAM HARVEY

Mr. O. M. Dalton has already shown himself to be a master of Oriental archæology, and his monumental work on East Christian Art must be regarded as authoritative.

It is essentially a book of reference and opens up avenues of future research in its plentiful notes and references to the publications of other investigators, whose views are not always compatible with one another.

The subject is a wide one, and is complicated at the outset by its own nature. Art was essential to some pagan religions; to Christianity it is but incidental, and the history of Christian art includes periods of revulsion and iconoclasm as well as periods of development and expansion. Christianity, too, is a religion which has traversed geographical and national boundaries and the local traditions of many different places and races have been woven into the service of its descriptive, illustrative, and didactic art. To follow the growth of Christian art among these many contributory sources and to recognise the effect upon it of political and military events is no light labour, and it is not an adverse criticism of Mr. Dalton's book to say that it demands from the reader concentrated attention if justice is to be done to it or to the reader himself.

The latent objection to art which may be read, or misread, into some passages of the New Testament, and which finds official recognition in the law of Moses concerning graven images, only needed a sufficient stimulus to produce a vigorous reaction against a growing tendency to venerate sacred paintings which manifested itself in the seventh century. Mr. Dalton describes how this stimulus came to be applied. "The enemies of pictures waited their opportunity with growing exasperation. It came after the Arab conquests in the first part of the seventh century, which followed earlier losses at the hands of the Lombards in Italy, and the exhaustion of the Persian wars. A feeling of soreness and humiliation was general and natural, when men saw the empire stripped of the great provinces of Syria and Egypt, and the Holy Land itself left under the dominion of Islam. In this feeling the elements opposed to ikons saw their advantage. Many of those who had fought in the Byzantine armies had been embittered by the abstention from national defence of the able-bodied monks in the religious houses throughout the Empire; and an obvious association of ideas might well suggest to them that since the monks were the especial champions of picture worship this worship was itself a contributory cause of imperial decay. It was easy to contrast with monastic defection the furious valour of the Arabs, and to remember that this was kindled by a faith which forbade the representation of God. The connection of victory with contempt for image-worship, and of defeat with devotion to it, seemed to angry minds more than a coincidence."

The author's description of the constructional art of

the Christian East would be equally well worth quoting and his comparison of the self-contained arrangements of a Byzantine domed church with the "Gothic church propped by external buttresses" is most lucidly expressed.

Neither form is constructionally perfect, but the Byzantine method has several notable advantages in land liable to be shaken by earthquakes of serious magnitude. Eastern constructional methods of vault building without centering date back to pre-Christian times, to remote antiquity, in fact; but the Eastern Church, building largely with tile-like bricks, adopted them in countries where timber for temporary supports was scarce.

The origins of several constructional features, such as the horseshoe arch and the pointed arch, are discussed, and early examples are quoted of the use of domes over square plans with pendentives or squinch arches to adjust the corners of the square chamber to the curved base of the dome. Plans are not given to illustrate the approach of these examples to geometrical accuracy, and it would have been worthy of mention that the "spherical pendentive" used in Byzantine architecture seldom attains to anything like a strictly circular plan or spherical surface. The use of freehand methods of setting out, and of constructional expedients which dispensed with a great deal of the rigid premeditated designing that goes to the formation of a modern building, naturally led to an art rich in improvised adjustments carried out experimentally during the actual erection of the pendentives and vaults.

Then original departures from true geometrical curvature were still further increased by distortion of the building masses in preliminary settlement and by the minute adjustments of arch thrust and abutment which take place during centuries of decay.

The departure of Byzantine work from the standard of execution established by ancient Greeks and Romans was formerly held to be a blemish, but this view is now being abandoned in favour of appreciation of the work on its merits and in accordance with its conditions. The formality of a Byzantine figure executed in painting or mosaic is now recognised as appropriate to its character as an architectural decoration. Added shading and correct linear and aerial perspective would destroy the constructive effect of the wall, pier, or vault to which it is applied. "The mosaics at present decorating the interior of St. Mark's at Venice are so various in date and manner that the effect as a whole is marred by incongruity of style." Many of the later mosaics actually seem to eat away the constructional supports and leave heavy arches and domes standing upon their naturalistically represented masses of flying drapery and inappropriate landscape effects.

In opening his chapter on Ornament, Mr. Dalton rightly insists upon the quality which differentiates Eastern from Classic art. "The ornament which so widely dispossessed classical decoration tended to cover the whole surface. The design being continuous or re-

\**East Christian Art. A Survey of the Monuments.* By O. M. Dalton. Oxford, at the Clarendon Press. 8°. 1925.



teaching, diffusion replaced centralisation; all parts had equal rights." The same "colouristic" principles are discernible in Byzantine carving, and their effects are made admirably clear in the introduction to the chapter on sculpture.

Apart from these general discussions of traditional method and aim, in which East and West are further apart than the poles, art criticism has been purposely avoided, though the author himself outlines in his Preface a scheme for a separate work on critical lines illustrated by "a chosen series of fine reproductions." History, nationality, locality and their mutual interaction are dealt with in the present volume.

The photographic illustrations are clear and well se-

lected, though monochrome is hard put to it to do justice to the multicoloured art of the East. Author, artist and printer are to be congratulated upon the coloured reproduction of Mr. Arthur Henderson's water colour drawing of "S. Sophia: Porphyry columns in the South-East Exedra looking west." This frontispiece suffices to show how structural considerations were made to add interest to a composition in which colour and form are inextricably mingled together to produce most glorious effects of genuine architectural art.

A general Index and an Index of Authors assist the careful student. Maps are also required, but the monuments mentioned are scattered over so large a field that reference to an atlas is the only satisfactory course.

## Mr. Neville Chamberlain, Minister of Health, on Housing

CONTRIBUTED BY PROFESSOR S. D. ADSHEAD [F.]

In his address before the Rural Councils Association, at the Guildhall on 29 June, Mr. Neville Chamberlain outlined his meditations, if not his considered conclusions, on matters pertaining to the future of town planning and housing.

It is well understood that there is to be a considerable reduction in the amount of the subsidy, with possibly some weakening of the conditions under which it is to be granted.

It is a controversial question whether the standard set up before the War, and practically adhered to at the present day, should be maintained. If a subsidy is to be given towards the building of houses with two bedrooms and no parlour, and if the density and conditions of site planning are to be allowed to revert more or less to the conditions obtaining before the War, then a retrograde step will be taken from which it will be difficult to retract.

Houses with very small accommodation are not suitable for families, and unless there are very stringent restrictions as to tenancy, and the houses are so disposed that they can be kept under the closest observation, they are liable to be misused.

If we are not careful there is great danger of our slipping back into the old terraces of pre-war fame. It would seem that the smaller the house, the greater the importance of restricting it to very small groups, and it is to be hoped that if a reduced standard of house is to be allowed this will not mean an increase in the number per acre.

Mr. Neville Chamberlain seems to be quite alive to the destruction of the amenities of rural districts which is occurring all over the kingdom owing to haphazard building. He envisages a time when the whole country will be regionally planned. He points out that Rural District Councils are the custodians of our villages, and that whilst the continuous demand for houses will have to be met in the main by the building of new houses, there are many worn-out cottages that might be reconditioned with the assistance of State funds.

This is very encouraging, but regional planning

practised under the most enlightened conditions, and old cottages reconditioned with State funds, will never preserve the amenities of our villages unless the more intimate question of architectural values is considered at the same time. His suggestions as to the reconditioning of old houses are most hopeful, but it is obvious that in their realisation there must be a considerable official strengthening of the architectural control.

### MR. CHAMBERLAIN'S SPEECH.

Mr. Chamberlain said that one of the most perplexing problems in present-day local government was the proper distribution of functions, especially where they got more than one authority having jurisdiction in the same area. On the one side there was a great store of local knowledge and experience and a desire to do local work. To destroy or damage that spirit would be folly, and a course to which no responsible Minister would lend himself. On the other hand, they had to consider that there were services which could not be economically and efficiently carried out unless in respect to a certain minimum population or area, and the problem was to combine these two things. They tried to do it by allotting certain functions to one authority and other functions to another, but, even so, they encountered fresh difficulties, and there was always the danger that where those two sets of functions were not correlated there would be left gaps and there would be services that were not performed because there was no one whose business it was to exercise a general supervision. Alluding to the question of the maintenance of rural roads, Mr. Chamberlain said they must have received with satisfaction the statement of the Ministry of Transport and of the Chancellor of the Exchequer as to the amount of money which would be placed on one side for the maintenance of rural roads. It amounted to £1,300,000 now, but he judged from some indications that in their view that was not sufficient. Anyway, it was a good beginning. In the opinion of the Ministry of Transport it was as much as at present could be judiciously spent on that purpose.

Turning to the question of housing, he referred to the difficulty in rural districts as one of long standing, but pointed out that since the war 183,000 houses had been built in rural areas, and of that number about 100,000 were State-aided houses. In the Act of 1924 a special effort was made to assist rural districts to build houses at a figure which would allow them to be occupied by agricultural labourers. About 6,000

houses had been authorized, and some 2,500 were either completed or under construction. It appeared that there was now some doubt and anxiety as to the future of those and other subsidies for houses. He was bound by Statute to review the conditions of the subsidy after 1 October, and that made it difficult for authorities to place contracts for houses which it might not be possible to complete before that date. The only way to anticipate that review was for the Minister to get into communication with the associations which represented the local authorities and discuss the best policy in the interest of housing generally and see if they could come to some satisfactory agreement. What he would try to arrive at was a definite date up to which any houses completed would receive the present subsidy, and an arrangement about the period following that date which would define what alteration, if any, there should be, either in the amount of the subsidy or the term for which it was to run.

When all was said and done, the provision of new houses was not a complete answer to the problem of rural housing while in the country villages there was not, as a rule, an increasing population; there were many old houses which had not been brought into accord with modern ideas. If such houses could be reconditioned, enlarged and generally restandardised, a substantial contribution might be made to the problem. An additional advantage would be that such reconditioned houses could be let at a rent within the reach of the agricultural labourer. He hoped to be able to introduce legislation on the lines indicated, and, if the owners were to be assisted in that way, it would be necessary to have some condition to secure that the benefit should go to the tenant and not merely into the pockets of the owner.

In a reference to town planning, he pointed out that the great building development was making serious inroads on the amenities of the country. The rural district councils were the trustees of those amenities. In their hands lay the future of the English countryside, and he trusted they would realise their responsibility. There was only one way to control this development, and that was by town planning. He was glad that a good many rural district councils had joined in regional town planning schemes. He would like to see the whole of England governed by regional town planning.—*The Times*, 30 June.

## Correspondence

### SCALE OF CHARGES.

2 July 1926.

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—The letter from "Experience" in the last issue of the JOURNAL raises an interesting point, but without impugning the title of the writer to the signature he uses, it may, perhaps, be permissible to query how far the case he states is typical, although he says in his first paragraph that it is "one out of many actual cases" which have come within his experience.

In the first place, in my experience the average client does not either state (1) a precise sum; nor (2) is he able to state at all precisely what accommodation he actually requires—I use the word "requires" rather than "desires" advisedly. Nor is he content to keep within the limits of the original conversation during the period whilst sketch plans are being prepared.

A far commoner procedure (and I also quote an actual case which is at the moment occurring) is as follows:

A client comes and says he wants to build a house, and proposes to spend "about" £2,500. He then

details the accommodation he *desires*, and incidentally mentions various specific requirements in planning and design, which have been culled from the pages of *Country Life* and other journals, and have no relationship to each other or to the practical necessities of the house under discussion. He is told at once that his desire have outrun his pocket, but he expresses a wish to see his dream palace on paper, after which, on cube or other method, a rough estimate is arrived at which approximates to £5,000. The inevitable struggle between desire and financial capability begins, continues through perhaps half a dozen variant sets of sketches, the architect cutting a bit here, and the client adding a bit there until (and at this point I leave the current case and continue on the basis of former experience which will, I hope, not be repeated) a compromise scheme is approved and sent out to tender.

At this stage, both parties have got, perhaps, a little tired of the struggle.

Whilst tenders are being obtained, the client presumably has time for careful consideration of his pass book, and when tenders come in at anything between £3,000 and £4,000 (a probability of which he has been warned, but which he has refused really to face), he says he won't go on and that "as there are no results, there has been no professional service rendered to him."

Is that so? "Experience," says the architect has merely wasted the client's time and caused him annoyance, but I rather think the boot is on the other leg, although the harm done to the profession is just the same.

With all respect to "Experience," he writes rather as the embittered client than as the somewhat tired architect.

If clients but knew what a room 28 feet by 16 feet really meant (they ask for rooms on that scale in a £2,000 house!) and what panelled halls, and sunken baths and all the other fantasies of a dream palace cost, I would agree that "Experience" had a case; but, in my experience, they start by saying that somebody's cousin of whom they have heard has bought a house containing all they ever desired for half what they intend to pay, and without verifying these facts, expect the unlucky architect to repeat a miracle which actually has never happened.

Surely, Sir, the labourer is worthy of, if not his hire, at least some remuneration for his work, and if the architect has, as I believe usually is the case, warned a client that his desires have outrun the possibilities of performance, then the client should pay for the time and thought wasted, which might otherwise have been spent on remunerative work.

As to whether the courts would award the £120 referred to, I need only refer "Experience" to "Oliver v. Brown and Wife," and other cases recently reported.—Yours faithfully,

WILFRED TRAVERS [F.]

Temple.

30 June 1926.

To the Editor, JOURNAL R.I.B.A.

SIR,—The chairman of the Practice Standing Com-



Committee publishes in the JOURNAL of 26 June a letter from "Experience," dealing with the case of the architect who, being commissioned to design a house to cost £2,000, gets out drawings for one for which the lowest tender is £3,000. The building owner abandons the scheme, and the architect sends in an account which charges 4 per cent. on this lowest tender of £3,000—that is to say, exactly the same amount as he would have been entitled to had he designed and superintended the erection of the house throughout for £2,000—the building owner's requirement.

"Experience" suggests that the Institute should consider whether the architect is entitled to any fee, and it may save some time and trouble if I point out at once that legally the architect has no claim in such circumstances. The ruling case is *Money Penny v. Hartland*, and such cases as *Flannagan v. Mate*, *Whitty v. Dillon*, *Nelson v. Spooner*, support that decision.

In my book on "The Law Relating to the Architect" I say: "If the architect is requested to furnish drawings for a building, the cost of which is not to exceed a certain sum, and he furnishes designs incapable of being executed for that sum, he cannot recover his fees. For he warrants technical skill and is bound to exercise care." These words sum up the law on the point.

Only a few months ago I was engaged in a case where an architect did not appear to be acquainted with this principle. He had designed a cottage hospital for the trustees of a charity, which was not to cost more than £5,000. The lowest tender was some thousands above that sum, and the trustees abandoned the scheme. The architect sued for his two-thirds of 6 per cent. of the lowest tender and lost.

On the other hand, I should like to point out that the disparity between the estimated and the actual cost must be so considerable as to be evidence of the want of care or skill, and, of course, any estimate made at the request of the owner from mere sketches and undetailed instructions cannot be regarded as warranted to be exact. Further, there may be some agreement between the owner and the architect as to the estimate not being required to be reasonably accurate. Failing these, however, the onus lies on the architect to adhere as near as may be to the stipulated cost.

There is one position in which the architect needs more protection than he enjoys at present. That is the case where a "ring" results in the tenders misrepresenting the proper cost, and consequently involve the architect in a dilemma from which it is desirable he should be extricated. It would be useful to formulate some simple method to protect him in these circumstances.

Your obedient servant,

A. H. M. BRICE, *Hon. A.R.I.B.A.*,

*Author of "The Law Relating to the Architect."*

6 Gray's Inn Place, W.C.1.

June 1926.

*To the Editor, JOURNAL R.I.B.A.*

SIR,—I have read with interest the letter from "Experience" addressed to the Chairman of the Practice Committee. The proposition put forward seems to divide itself into two problems.

1. If an architect is instructed as to the cost of a proposed building and the estimates, when obtained, materially exceed that cost, then the architect cannot, as a general proposition, substantiate his claim for payment on the principle that the employer has received no benefit and he has been deceived by the architect. See *Money Penny v. Hartland* (1824) (1826), *Nelson v. Spooner* (1861).

2. A client frequently not only makes a stipulation as to cost, but also makes a condition that the property shall be of certain dimensions and contain given accommodation. In such case where the conditions obviously conflict the benefit will be in favour of the architect, provided he has notified the employer, and in such case as a general proposition the architect should succeed.

See *Oliver v. Brown* (1926).

The present schedules of the Institute seem quite consistent with present-day practice, and it is difficult to see how they could, in this particular, with advantage be amended.

I am, dear sir, faithfully yours,

W. E. WATSON [F.].

1 Lincoln's Inn Fields, London, W.C.2.

5 July 1926.

*To the Editor, JOURNAL R.I.B.A.*

DEAR SIR,—I have read, with considerable interest, the letter from Mr. J. W. Scott, published in your last issue, dealing with the scale charges for sketch plans, and for making working drawings for work which does not mature.

I entirely agree with the views expressed and believe that, owing to the scale of fees for preliminary work being so high, architects lose many possible clients. To my mind, these preliminary fees have little proportion to those charged for work which is carried out, and I think most architects will agree that the work of supervising the erection of a building, making details, issuing certificates, settling up the contracts, etc., especially for small house work, is worth considerably more than that involved in the preliminary stages.—Yours faithfully,

COURTENAY M. CRICKMER [F.].

*To the Editor, JOURNAL R.I.B.A.*

SIR,—I have heard of two or three very similar instances in this vicinity (one very bad one), and agree with "Experience" that something should be done in the matter.

Of course, usually the potential client has very much bigger ideas than his purse or the amount he desires to spend allow, and often he is really willing to spend more and has merely given a figure as a "feeler." It would be unwise of a practitioner to give a blunt negative without first putting in a little work on a sketch and cubing it. If he did give a bald "No" probably the potential client would go elsewhere and be differently treated by a less honest man—or direct to a builder. (In this district most builders give "plans and estimates free," and it is the curse of the profession.)

Also, without some work, it is often not easy to give a forecast of what can be done for a given figure.

But I do think that some procedure such as the following might be adopted :—

1st. Give a non-committal reply rather on the affirmative side if the thing seems at all possible.

2nd. Get out a rough sketch of accommodation and size only and cube it at a fair figure ; and then

3rd. See the client and discuss matters and show him first what it will cost to do what he wants—and second, what he can have for what he wishes to spend.

For this work a very much lower figure than even the 1½ per cent. sketch fee could be charged, as the work only takes, say, a day or so, and the sketch plans are not complete or approved.

If the client refuses to proceed further, then charge him a few guineas for the work and advice, which has at least saved him greater expense and worry.

I have myself proceeded on these lines and found that the client generally increases his allowance a fair amount so as to strike an average, or cuts down his requirements. He then, of course, expects one, and rightly, to keep to that allowance, and on one occasion when, owing to bad luck and the client adding things as the drawings were being prepared, the lowest tender exceeded the £1,400 allowance by over £200, I re-drew the plans gratis on less ambitious lines, and eventually built for £1,363, and charged on that figure, to the satisfaction of my client. It means more work, but makes a friend for myself and the profession.

It seems to me that some definite limit of excess should be set, beyond which if an architect proceeds to working drawings and calling for tenders he cannot collect his fees.

An architect should certainly be able to forecast ordinary work within, say, 7½ per cent. either way from his sketch plans, and in no case should a client be put to more expense than the 1½ per cent. for sketch plans owing to cost of work exceeding his given figure.

The rules I have suggested do work ; I have not had a job "go dead" yet owing to too high cost, nor have I yet had a job come out materially more than the figure given me at the end of my second interview with the client. (Of course, some jobs have not proceeded beyond the rough sketch stage owing to probable cost.)—I am, Sir, yours, etc.,

JAIN MACGILL-EATHAIN.

## HISTORY OF THE SOCIETY OF ARCHITECTS

28, Bedford Square, W.C.1.

9 July 1926.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—Will you kindly permit me to state that if there are any ex-Society members of the Institute who have not yet received a presentation copy of the History, they should notify me so that the omission may be made good.

Some few copies have been returned to me through the post owing to changes of address, etc.—Yours faithfully,

C. McARTHUR BUTLER.

## THE KING'S BIRTHDAY HONOURS.

In the list of Birthday Honours published on 3 July, members would be gratified to find that the honour of Knighthood had been conferred on two members of the Institute, Mr. Herbert Baker and Mr. Andrew Thomas Taylor ; on Mr. Baker for "his services to art," and on Mr. Taylor, who for many years has retired from practice, "for public and political services."

Sir Herbert Baker's achievements in architecture are familiar to all students of modern buildings. The son of Mr. T. H. Baker, of Cobham, Kent, he was born in 1862. He was educated at Tonbridge School, and was articled to Mr. Arthur Baker, a Fellow of the Institute. For some time he was assistant to Sir Ernest George and Peto ; he was a student at the R.A. Schools and won the Ashpitel Prize in 1889 (awarded to the student who distinguishes himself most highly in the Final Examinations held during the year). Sir Herbert Baker went to South Africa in 1892, where he built Groote Schuur and other works for Mr. Cecil Rhodes. After the South African War Sir Herbert practised in the Transvaal and generally in South Africa. The following is a list of his most important works in South Africa, England, and India, up to the present time :

LONDON : The Bank of England.

NEW DELHI : The Secretariats ; Legislative Buildings.

SOUTH AFRICA : Union Buildings, Pretoria ; Government House, Pretoria ; Railway Station, Pretoria ; The Cathedral, Pretoria ; The Cathedral, Salisbury, Rhodesia ; The Cathedral, Cape Town (with Mr. Masey), and other churches ; South African Institute of Medical Research, Johannesburg (with Mr. H. L. F. Fleming) ; Union Club, Johannesburg (with Mr. H. L. F. Fleming) ; Rhodes Memorial, Table Mountain.

ENGLAND : Harrow School War Memorial ; Winchester College War Memorial ; Kent County War Memorial, Canterbury ; Hampshire and Isle of Wight War Memorial ; Cubley Village, Penistone ; House at Lympne for Sir Philip Sassoon, Bart. (with Mr. E. Wilmott).

Sir Herbert was elected an Associate in 1890, a Fellow in 1900, and an Associate of the Royal Academy in 1922.

Sir Andrew Thomas Taylor, J.P., L.C.C. R.C.A., Retired Fellow R.I.B.A., the son of the late Mr. James Taylor, publisher, was born in Edinburgh in 1850. He was educated at Edinburgh, and was a student of the R.A. Schools, London. After practising for a short time in London Sir Andrew Taylor went to Canada in 1883 and practised in Montreal and throughout the Dominion ; he was architect for the Merchants' Bank of Canada, the Molson's Bank, and carried out many important buildings, including the McGill University, Lennoxville College, Royal Victoria Hospital, etc. He retired from practice and returned to England in 1904. Sir Andrew has represented Hampstead (of which he is an ex-Mayor) on the London County Council since 1908. He was vice-chairman of the L.C.C. in 1923 ; and he is a member of the Senate of the University of London.

Sir Andrew was elected an Associate in 1878, a Fellow in 1889, and became a Retired Fellow in 1915. In his early days he had the distinction of winning on two occasions the Institute Essay, in 1874 for "Architecture in London in the Sixteenth Century," and in 1881 for "The Towers and Spires designed by Sir Christopher Wren."



### PROPOSED MEMORIAL TO SIR CHRISTOPHER WREN.

The Council of the R.I.B.A. have decided to open a Subscription list to enable members to contribute to the cost (estimated at £65) of placing a window in the Old Ashmolean building at Oxford as a memorial of Sir Christopher Wren.



ASHMOLEAN MUSEUM  
THE ENTRANCE

The design will be Sir Christopher's coat of arms in a cartouche to pair with the Ashmole Memorial Window.

Members desiring to subscribe to this object are requested to send cheques or postal orders to the Secretary of the R.I.B.A., 9 Conduit Street, W.1. The amounts received will be noted in the JOURNAL.

WREN MEMORIAL WINDOW.  
*Subscription List.*

	£	s.	d.
Langton Cole [F.]	..	..	..
	I	I	0

### TOWN PLANNING INSTITUTE

Mr. W. R. Davidge [F.], Senior Vice-President of the Town Planning Institute, has been elected President of the Town Planning Institute for the year 1926-7.

## Allied Societies

### THE ASSOCIATION OF TRANSVAAL ARCHITECTS.

RETIRING ADDRESS OF THE PRESIDENT (MR. G. S. BURT ANDREWS [F.]).

On 26 February, 1926, Mr. G. S. Andrews gave his retiring address as President of the Association of Transvaal Architects, from which we take the following extracts:—

One of the most important events of the year has been the amalgamation of the Royal Institute of British Architects and the Society of Architects. The fusion of two such strong and influential bodies is bound to strengthen the ties of the architectural profession over the whole of the British Empire. This satisfactory result was not brought about hurriedly. For a long time it was given careful thought and consideration by many of Britain's foremost men in the architectural profession, and now that the amalgamation has become an accomplished fact we may safely look forward to many practical improvements.

Another important proceeding has been the drafting of the Private Bill for the Registration of Architects in the Union of South Africa. This entailed a considerable amount of labour on the part of those closely associated with it. The private Act of the Transvaal has been in existence for upwards of sixteen years, and its successful working during that period should have considerable weight with the legislators of this country now that the new Bill is before Parliament. The desirability of Registration is generally recognised all over the world, and it is only a matter of time when the public will be protected in connection with building operations as with law, medicine, dentistry and survey work.

One of the most gratifying actions of the Provincial Administration in so far as the architectural profession is concerned has been the placing of one of its architectural jobs in the hands of a local practitioner. It is hoped that this form of encouragement to architects in private practice will continue, not because of any lack of confidence in the officers of the Public Works Department, for we know that many of them are highly qualified and competent men, but because the man who is battling his way to make a living should be given a chance as much by Government and municipal authorities as by private individuals.

That brings me to the subject of competitions. Governments and municipalities frequently decide to erect important public buildings of a more or less monumental character and it always seems to me that such undertakings should be thrown open to public competition. It might be argued that the staff of a Public Department might like to give some indication of their skill and ability in the design and planning of such buildings; if so, it should not be a difficult matter to arrange suitable conditions to meet such cases. In some instances the staff officials may have intimate or expert knowledge of special work, but it is always possible that the private practitioner may have equally good knowledge and be capable of preparing a design in some ways superior to the staff official. Such a possibility will always exist, and it seems to me that full advantage should be taken of it. I fully realise that this is a debatable point, but I am merely offering my views on it, not only as your retiring president, but also as the head of a large municipal department which embraces architectural work.

An outstanding feature of the work of the Association is the continued success of the South African Academy. The exhibition of local talent cannot fail to exercise a beneficial influence on the local mind, especially with the large number of students and scholars who are encouraged to visit the exhibition by there being no charge in their case for admission.

The satisfactory result of this enterprise is largely due to the untiring efforts of our energetic Registrar (Mr. Carpenter).

## Obituary

MISS G. L. BELL.

Miss Gertrude Lowthian Bell, the news of whose death in Baghdad has recently come to England, besides being a remarkable stateswoman, was a scholar and archæologist of no mean ability, and in her books before the war made familiar the then almost unknown architecture of the deserts of Syria and Mesopotamia. Her chief work was on the desert palace of Ukhaidir, an eighth century Arab fortress, a great work done under very difficult conditions. During the war and during the settlement of Mesopotamia, she had little time to spare for archæology, but lately she had been doing a great deal to establish a department of Archæology in Baghdad and an Iraq museum.

H. C. H.

ROBERT CUNINGHAME MURRAY [F.].

Mr. Robert Cuninghame Murray, who died on 12 June at the age of seventy-five, was the senior partner of the firm of Murray, Delves and Murray. He became a Fellow of the Royal Institute of British Architects in 1907.

Coming up to London from Hastings in about 1870, Mr. Murray entered the office of Mr. Parkinson, a District Surveyor for the City, who also carried on an old-established practice at No. 1, Racquet Court, Fleet Street. On Mr. Parkinson's retirement Mr. Murray continued for many years to practice at the same address, eventually, in 1915, moving into offices in Kings Bench Walk, Temple.

In 1907 Mr. Murray took into partnership Mr. S. W. W. Delves and in 1921 Mr. C. H. Murray, a nephew of Mr. Murray, joined the firm.

Amongst Mr. Murray's works were St. Bride Foundation, Institute, which he won in competition; Sandle Manor, Fordingbridge, Hants; a small rectory at Shackerstone for the Earl Howe; extensive printing works for Messrs. Eyre and Spottiswoode and for Messrs. Spottiswoode, Ballantyne and Co.; offices, showroom and factories for Messrs. Harrild and Sons; premises in Nelson Square originally erected as the head offices of Messrs. Straker-Squire, but now occupied by Messrs. Shaw and Sons, Ltd.; No. 46 and No. 55, Fleet Street; the baths at Sidmouth, and numerous houses in the neighbourhood of Sidmouth, where for some time he had a branch office; alterations and additions to Mr. Hugh Spottiswoode's house at Porthgidden, Cornwall; and the development of the Belvedere Estate at Wimbledon.

For many years Mr. Murray acted as surveyor to the Governors of St. Bride Foundation, the trustees of Lord Egmont's Settled Estates, the trustees of the Broxbournebury Settled Estates, and the trustees of the J. L. Clayton Estates. He also acted for the Right Hon. Sir T. F. Halsey in connection with his London property, and for the trustees of the Crawley Estate in London.

JOHN GAFF GILLESPIE [F.].

We regret to announce the death of John Gaff Gillespie, of the firm Gaff Gillespie and Kidd, Glasgow, which took place on 7 May last.

After serving his apprenticeship with Mr. A. M. Munro he joined the staff of James Salmon and Son and became a partner in 1897.

In 1906 he was elected a Fellow of the Institute.

Shortly after the death of W. F. Salmon in 1913 the firm, then styled Salmon and Son and Gillespie, was dissolved by mutual agreement, the late James Salmon and Mr. Gillespie carrying on business independently.

In 1918 A. Kidd joined him as a partner.

Amongst the various buildings carried out to his designs are the following:—

Govan branch of the British Linen Bank; the Glasgow Savings Bank, Anderston Branch; the Temperance League Building, Glasgow; Lanfine Cottage Hospital, Broomhill; and additions to Cranstonhill Bakeries, Glasgow; Cadoro Restaurant, Glasgow; Dunoon Seaside Homes; Plantation Bakery, Glasgow.

His successful competition work included Pollok Golf Club House; Hutchesontown Congregational Church, Glasgow; Stirling Municipal Buildings.

### SCIENCE STANDING COMMITTEE.

"BUILDING SCIENCE ABSTRACTS."

By the courtesy of Dr. Stradling, Director of Building Research, information in the possession of the Department of Scientific and Industrial Research upon Building Materials and Practice is placed at the disposal of members of the R.I.B.A.

A comprehensive synopsis of the numerous activities of the Department has been placed in the Reference Library, together with copies of *Building Science Abstracts*, issued monthly.

The latter consist of a very large number of short descriptive notes of new information upon matters relating to or connected with building and decoration which have been collated by the Department from the technical press of the world. The necessary information to enable any particular piece of new information to be studied at length at its source is added to each note.

Some of the information thus rendered available is of course only of very remote interest to architects in practice, and part records the progress of incomplete research work. Two members of the Science Standing Committee therefore go through the Abstracts upon their receipt and mark any items which appear to be of general and immediate interest.

### BOARD OF ARCHITECTURAL EDUCATION.

CONFERENCE WITH TEACHERS OF BUILDING.

On Wednesday, 21 July, at 2.30 p.m., in the R.I.B.A. Galleries, the Schools Committee of the Board of Architectural Education will hold a Conference with the representative Teachers of Building who are in London on a course arranged by H.M. Board of Education.

A Paper will be read on "The Elements of Design in the Teaching of Building Construction" by Professor A. E. Richardson [F.]. A discussion will follow.

There will be an exhibition of architects' working drawings in the Galleries.

It is hoped that the Conference will be largely attended and that there will be a free interchange of views.

No tickets of admission are required.



## R.I.B.A. MAINTENANCE SCHOLARSHIPS.

The Maintenance Scholarships Committee of the Board of Architectural Education announce that they have received contributions and promises of subscriptions to the Maintenance Scholarships Fund to a value of about £540 per annum, in addition to donations of £60 for this year, towards the £1,000 per annum which the Board hope this fund will reach in the near future.

The Council R.I.B.A. . . . .	£100 per annum
The late Society of Architects . . . . .	£1,000
The Artists' General Benevolent Institution . . . . .	£100 per annum
The Proprietors of <i>The Builder</i> . . . . .	£250 (to be spread over three years)
The Northern Architectural Association . . . . .	£50 per annum
The Leicester and Leicestershire Society of Architects . . . . .	£10 per annum
The South Wales Institute of Architects . . . . .	£35 per annum
The Liverpool Architectural Society . . . . .	£35 per annum
The Manchester Society of Architects . . . . .	£75 per annum
The Hampshire and Isle of Wight Association of Architects . . . . .	£10
The Nottingham and Derby Architectural Society . . . . .	£10 10s.
The Association of Architects, Surveyors and Technical Assistants . . . . .	£30
Collected by the Chairman of the Home Counties Area Committee . . . . .	£15 15s.
The Berks, Bucks and Oxon Architectural Association . . . . .	£10 10s. per annum for three years

The Rev. Dr. and Mrs. Hugh Currie have promised to leave the sum of £1,000 to found a Maintenance Scholarship in memory of their son.

A large number of applications for Scholarships have been received, and the first set of Scholarships will be awarded early in July.

The Board of Architectural Education of the Royal Institute of British Architects announce that the following holders of R.I.B.A. Maintenance Scholarships in Architecture, varying from £50 to £100 per annum, have been elected:—Austen K. Brown, Sunderland; E. L. W. Davies, Colchester; B. I. Day, Bideford, Devon; Jackson, Birmingham; E. J. White, Hull; J. O. Mason, Whitstable (Artists' General Benevolent Institution Scholarship).

The Scholarships are intended to enable promising students to attend approved courses at Schools of Architecture recognised by the R.I.B.A. for the purpose of exemption from its Examinations.

Applications for Scholarships were received from many candidates, and it was a matter of great regret to the Committee responsible for the award of the Scholar-

ships that it was impossible on financial grounds to award a greater number.

The Scholarships clearly supply a need in the architectural profession, and it is hoped in the future to be in a position to award Scholarships to a total value of £1,000 annually. With this object in view, a Capital Fund has been started which it is hoped to increase materially, and it is further intended to found other Scholarships for brilliant students to enable them to continue their architectural education for longer periods.

## ROME SCHOLARSHIP AND R.I.B.A. (HENRY JARVIS) STUDENTSHIP FOR 1926.

On the recommendation of the Faculty of Architecture of the British School at Rome, the Commissioners of 1851 have awarded the Rome Scholarship in Architecture for 1926 to Mr. A. D. Connell, a member of the London University Atelier; and on the recommendation of the same body the R.I.B.A. (Henry Jarvis) Studentship has been awarded to Mr. Herbert Thearle, A.R.I.B.A., of the University of Liverpool.

Mr. Connell was articled for four years to Mr. Stanley W. Fearn [A.] of Wellington, New Zealand; he studied for two years at the London University Architectural Atelier and during this period worked in various London offices, including the office of Messrs. William and Edward Hunt.

Mr. Thearle, who is 22 years of age, entered the Liverpool School of Architecture in 1920. He became an articled pupil of Messrs. Briggs and Thornely, F.F.R.I.B.A., in 1921, was Holt Travelling Scholar, 1923, and spent three months in studying French architecture; Vacation Sketching Prize, 1923; John Rankine prizeman in 1924 and 1925; was Honan Travelling Scholar, awarded by the Liverpool Architectural Society for a design for the Mersey Tunnel entrance, 1924; and then spent three months in the study of Italian architecture; Rome Finalist in 1924; Holland, Hannen and Cubitt's prizeman for constructional drawings, 1925; and graduated with first class distinction in Architectural Design in 1925. After taking the professional practice examination in London, Mr. Thearle was elected an Associate of the R.I.B.A. in November, 1925. He was awarded an Honourable Mention in the Soane Medallion, 1926, and (in collaboration with Mr. L. G. Hannaford) was recently awarded first premium in the Birkenhead Art Gallery Competition, work on which is now in progress.

## NOTES FROM MINUTES OF COUNCIL,

31 May 1926.

## RESIGNATIONS.

The following resignations were accepted:—

W. W. Scott-Moncrieff [F.]	A. T. Wright [A.]
A. K. Brown [A.]	A. F. Poole [L.]
L. C. Brooks [A.]	T. H. Russell [L.]
A. C. Denny [A.]	J. Stables [L.]

## SUSPENSION.

By a Resolution of the Council pursuant to the By-law No. 25 the following member has been suspended from membership of the Royal Institute of British Architects for six months from 31 May 1926:—

George Harry Bertram Gould, A.R.I.B.A.

## NOTES FROM THE MINUTES OF COUNCIL.

21 June 1926.

## THE CONSERVATION OF ANCIENT MONUMENTS AND REMAINS.

On the recommendation of the Art Standing Committee a revision of the two official R.I.B.A. documents upon this subject which appear in the Kalendar was approved and ordered to be published.

## THE OLD ASHMOLEAN.

It was decided to open a subscription list for the purpose of providing a Wren Memorial Window in the Old Ashmolean building at Oxford.

## THE PRESERVATION OF OLD BRIDGES.

On the recommendation of the Art Standing Committee the Board of Architectural Education was requested to invite all recognised schools to encourage their students to measure bridges of architectural or archaeological interest.

## MR. CASS GILBERT.

The Council sent their congratulations to Mr. Cass Gilbert, Hon. Corresponding Member, on the occasion of his election as President of the National Academy of America.

## LONDON BUILDING ACTS.

The report of the London Building Acts Committee on the revision of the Acts was received by the Council and it was decided to send a comprehensive statement to the L.C.C. on the subject and to request that body to receive a deputation.

## SMOKE PREVENTION.

On the recommendation of the Science Standing Committee it was decided to request the L.C.C. to reconsider their decision on the subject of a suggested enquiry into smoke prevention.

## THE FORESTRY COMMISSION AND THE R.I.B.A. SCALE OF CHARGES.

On the recommendation of the Practice Standing Committee it was decided to forward certain correspondence to the Forestry Commission and to urge that proper fees should be paid and fully qualified architects should be employed.

## HON. SECRETARY R.I.B.A. FOR CANADA.

Mr. Victor Horsburgh [*F.*] of Toronto was appointed Hon. Secretary for Canada in succession to the late Mr. F. S. Baker.

## MEMBERSHIP.

Mr. Arnold Mitchell was transferred from the list of Retired Fellows to the list of Practising Fellows.

Mr. R. C. Jones was reinstated as a Licentiate.

The resignations of the following members were accepted with regret:—

W. A. Gagnon [ <i>L.</i> ]	H. C. Richardson [ <i>A.</i> ].
J. O. Harris [ <i>L.</i> ]	W. P. Schofield [ <i>A.</i> ].
G. H. Higginbottom [ <i>L.</i> ]	W. White-Cooper [ <i>F.</i> ].
S. S. Reay [ <i>F.</i> ]	H. J. Yorke [ <i>L.</i> ].

## INTERNATIONAL HOUSING AND TOWN PLANNING CONGRESS, VIENNA.

Mr. E. C. P. Monson was appointed delegate of the R.I.B.A. to this Congress to be held in Vienna from 14 to 19 September 1926.

## STUDENTSHIP.

On the recommendation of the Board of Architectural Education the following were elected Students of the R.I.B.A.:—

Barton: Harry Austin, 4 Ferndale Street, Cardiff Technical College, Cardiff.

Bomer: Edward Dixon Neville, Marsham Manor, Gerard's Cross, Bucks, Architectural Association.

Booth: Rolfe Gilbert, Lakeswood, Town Court, Orpington, Kent, Architectural Association.

Ellis: Mary Feodore Ruth, 44 Clarendon Road, W.I. Architectural Association.

Hill: Henry Erskine, Norbury Vicarage, Wakefield, Leeds School of Art.

Kelsall: John Scott, Rydal Mount, St. John's Road, Eastbourne, Architectural Association.

MacManus: Frederick Edward Bradshaw, 39, Rotherwick Road, N.W.11, Architectural Association.

Micklethwaite, Daniel Marriott, 3 Staverton Road, Oxford, University of London.

Mirams, Dennis George, University College, Gower Street, W.C.1, University of London.

Shand, George Shaw, 54 Kengarth Street, Glasgow, Glasgow School of Architecture.

Sutcliffe, Brian Lister, 44 Temple Fortune Hill, N.W.11, University of London.

Walker, Stansfeld Thomas, 5 Harrington Court, S.W.1, Cambridge University.

## Notices

## R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28 Bedford Square, London W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the Committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.

## R.I.B.A. GARDEN PARTY.

The Members and Students of the R.I.B.A., the Architectural Association and the Allied Societies have been invited to a Reception at the Royal Botanic Gardens on Thursday, 22 July, from 4 p.m. to 7 p.m. The guests will be received by the President and Mrs. Guy Dawber. The Band of the Royal Air Force will be in attendance and a party of children from the Margaret Morris School of Dancing will give a display of dancing during the afternoon.

In the evening a fête will be held in the Royal Botanic Society's Gardens, which will be opened at 8 p.m.

A dramatic performance will be given by the Architectural Players at 8.30 p.m. of *The Rose and the Ring*, by W. M. Thackeray, preceded by *A Night at an Inn*, by Lord Dunsany. Admission free. There will be dancing from 11 p.m. until 3 a.m. ("Spiders" band).

Tickets for the fête, including refreshments and dancing, are 5s. 9d. each (after 17 July the price will be 6s. 6d.). These may be obtained from the Secretary of the R.I.B.A., 9, Conduit Street, or from the Secretary, Architectural Association, 34, Bedford Square, W.C.1.



## WARNING.

Members are victimised from time to time by impostors who call upon or write to them claiming to be architects in distress. Members are strongly advised before yielding appeals of this character to communicate with the Architects' Benevolent Society (Telephone: Mayfair 0434).

## LIMITED COMPETITIONS.

The following is the report of the Scrutineers appointed by the Council to count the votes in the Referendum under Bye-law 70 on the Subject of Limited Competitions:—

## REFERENDUM ON LIMITED COMPETITIONS.

The Scrutineers appointed to count the votes on the resolution embodying the proposals of the Council of the R.I.B.A. for the control of Limited Competitions, report as follows:—

1,204 Voting papers were received.

1,015 Members voted in favour of the Resolution.

172 Members voted against the Resolution.

17 Voting papers were invalid.

The Scrutineers therefore declare the following resolution carried:—

## RESOLUTION.

That the following Clause be added to the R.I.B.A. Regulations for Architectural Competitions:—

"In the case of small, limited, private competitions where the Royal Institute are satisfied that special circumstances may exist, modification of these regulations may be approved by the Royal Institute.

Competitions coming within the scope of this Clause are:—

(i) Where the competing architects are limited by selection or invitation, and do not exceed six in number.

(ii) Where the proposed competition does not involve the expenditure of public funds.

Provided that nothing in this Clause shall prevent two or more members of the Royal Institute from giving advice or preparing sketch plans for the same project for a private client, if the expenditure proposed does not exceed the sum of £12,500, and if each of the Members invited be paid an agreed fee."

(Signed) SYDNEY TATCHELL, *Chairman*

ROBERT LOWRY.

ERNEST G. ALLEN.

W. BRAXTON SINCLAIR.

J. A. PYWELL.

# Competitions

## CENOTAPH FOR LIVERPOOL.

The Corporation of Liverpool invite architects to submit designs in competition for a Cenotaph to be erected on a site on the plateau in front of St. George's Hall, Liverpool. Assessor, Professor C. H. Reilly, O.B.E. [F.] premiums, £200, £150, £100, and £50. Last day for receiving designs 30 September 1926. Total cost £10,000. or conditions apply to Town Clerk, Municipal Buildings, Liverpool.

## RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

## BROMSGROVE RURAL DISTRICT HOUSING COMPETITION.

Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

## SCHEME FOR BUILDING LARGE RESIDENCES, CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competition.

## MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

## LEAGUE OF NATIONS.

### COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide the order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

The President of the R.I.B.A. has been informed by the Secretary of State for Foreign Affairs that the competition in connection with the above will open on 25 July 1926.

One hundred and fifty copies of the programme of the competition will be forwarded to the R.I.B.A. as soon as they are received from Geneva.

#### AUSTRALIAN NATIONAL WAR MEMORIAL AT VILLERS BRETONNEUX

The date for the submission of designs in the above competition has been further extended from 31 May to 31 July 1926.

#### SCOTTISH LEGAL LIFE ASSURANCE SOCIETY: NEW AND ENLARGED PREMISES.

The President of the Royal Institute of British Architects has nominated Mr. John Keppie, A.R.S.A., F.R.I.B.A., as Assessor in this competition.

## Members' Column

#### FORMATION OF PARTNERSHIP.

MR. C. F. MARSTON, Assoc.M.Inst.C.E., Licentiate R.I.B.A., has taken into partnership his chief assistant, Mr. A. L. Linford, and the business will be carried on at 36 Market Street, Tamworth, under the name of Marston and Linford.

#### DISSOLUTION OF PARTNERSHIP.

THE partnership carried on in the name of Messrs. De Souza and Wands, architects and surveyors, of Rangoon, has been dissolved as from 30 January 1925.

#### PARTNERSHIPS WANTED.

F.R.I.B.A., age 42, requires Junior Partnership or position of trust with view to same with good established firm of Architects in London or South. First-class London experience. Small capital available. Keen and active.—Reply Box 6244, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

A.R.I.B.A., age 36 years, desires partnership or position with a view to partnership in London or South of England. Small capital available. Is energetic and unafraid of work. Can commence immediately.—Apply Box 1646, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

A.R.I.B.A. (35), with use of West-End office and telephone, which would remain available, desires Partnership in well-established practice in or near London. Trained in recognised architectural school and has had wide office experience in London and the provinces. Would invest capital if prospects were sufficiently good. Testimonials. Reply Box 7812, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

#### CHANGE OF ADDRESS.

MR. THEODORE E. LEGG [A.] has changed his address to Raymond House, 32-34 Theobald's Road, W.C.2. Telephone: Museum 6290.

MR. T. AIKMAN SWAN [A.] has changed his address from 42 Frederick Street, Edinburgh, to 7 St. Colme Street.

MR. STEPHEN WILKINSON, F.R.I.B.A. (consulting architect [to the London and North Eastern Railway Co.]), has removed his head office (to 21 Northumberland Avenue, London, W.C.2 (telephone: Gerrard No. 3898), and will practise from that address with branch office at Leeds.

#### APPOINTMENTS WANTED.

A.R.I.B.A., age 38, desires permanent position London or provinces, preferably with view to interest or partnership. General experience, keen and energetic.—Reply Box 1776, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

ARCHITECT (F.R.I.B.A. and F.S.I.), partner in old-established Northern firm but with the experience of sole charge of London branch office for 20 years, desires to assist temporarily London architect in some senior capacity, part-time or otherwise.—Reply Box 3853, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

#### PRACTICE WANTED.

WANTED to purchase: well-established Practice or Partnership in a prosperous Country Town. Apply Box 8668, c/o Secretary R.I.B.A., 9, Conduit Street, W.1.

#### VACANCY FOR STUDENT.

ARCHITECT (F.R.I.B.A.) has immediate vacancy for advanced Student or Improver (either sex) for training under personal supervision view advancement. Neighbourhood Baker Street.—State full particulars.—Reply Box 9424, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

#### OFFICES TO LET.

ARCHITECT (F.R.I.B.A.) wishes to let portion of his offices adjoining Bedford Row, W.C.1; well lighted, quiet situation, telephone vacant. Either two rooms at £75, three rooms £105, four rooms £140 per annum, all en suite. Might arrange mutual services.—Apply Box 1762, c/o Secretary, R.I.B.A., 9, Conduit Street, W.1.

#### FOR SALE.

FOR SALE.—Theodolite and Dumpy Level with Stands and Measuring Staff. Old makes but in good condition. Inspection can be arranged.—Write W. A. M. Fiddaman, "Brown Tiles," Sanderstead, Surrey, for any further particulars.

#### ARCHITECTS' BENEVOLENT SOCIETY.

INSURANCE SCHEME, FOUNDED 1923.

All kinds of insurances negotiated: Life, Motor Cars, Burglary, Protection of Buildings in course of erection, etc. Over £200,000 has already been insured. Enquiries to the Secretary, A.B.S., will meet with immediate attention.

Architects' Benevolent Society,

9 Conduit Street, W.1.

Telephone: Mayfair 0434.

#### NATIONAL HEALTH AND PENSIONS ASSURANCE

The Architects' and Surveyors' Approved Society,  
26 Buckingham Gate, London, S.W.1.

#### CONTRIBUTIONS.

The contribution for men is 1s. 6d. per week, 9d. of which is payable by the employer, and for women 1s. 1d., 7d. of which is payable by the employer.

#### ORDINARY BENEFITS (HEALTH INSURANCE).

**Sickness Benefit.**—Men, after 26 contributions have been paid, 9s. weekly; after 104 contributions have been paid, 15s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly; after 104 contributions have been paid, 12s. weekly.

**Disablement Benefit.**—Men and women, 7s. 6d. per week, after 104 contributions have been paid.

**Maternity Benefit.**—40s. after 42 contributions have been paid.

#### ADDITIONAL BENEFITS (HEALTH INSURANCE).

The recent valuation of the Society's assets having shown a largely increased surplus, the following scheme of additional benefits was brought into operation from 6 July 1925:

**Sickness Benefit.**—Payable at the increased rates of 22s. per week for men, and 19s. for women.

**Disablement Benefit.**—Increased to 11s. per week for both men and women.

**Maternity Benefit.**—Increased to 54s.

**Special Benefits.**—Grants made to members entitled to "additional benefits" for the full or part cost of optical, dental, hospital, nursing home or convalescent treatment, also for glasses, surgical appliances, artificial teeth, etc. Members may choose their own dentists, opticians or institutions.

Forms of application for membership, also pamphlet detailing the benefits under the new Pensions Act, may be obtained from the undersigned.

HERBERT M. ADAMSON, Secretary.

#### R.I.B.A. JOURNAL.

Dates of Publication.—1926: 14 August; 18 September; 16 October.



# Journal of the Royal Institute of British Architects

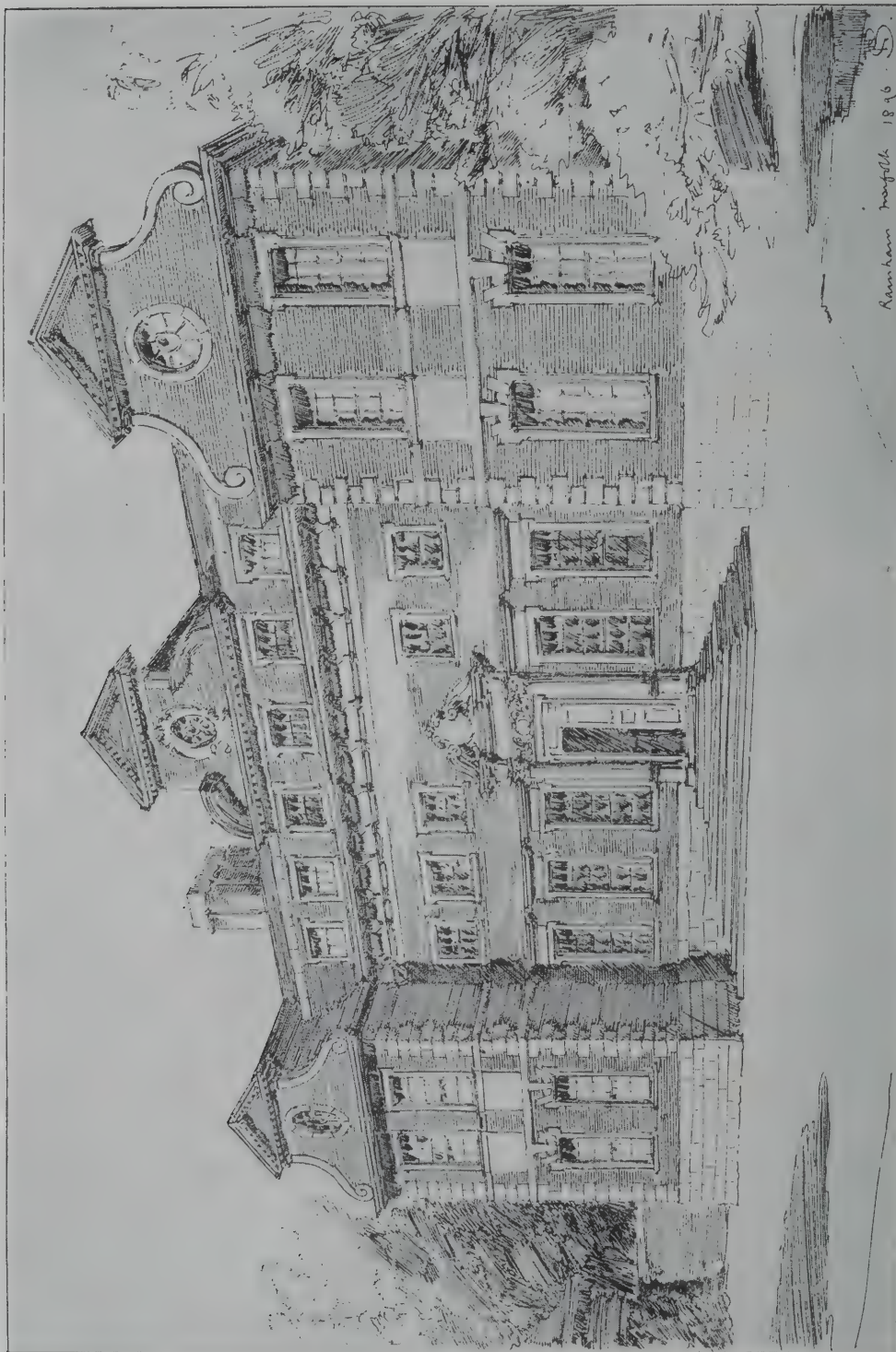
VOL. XXXIII. No. 18

THIRD SERIES

14 AUGUST 1926

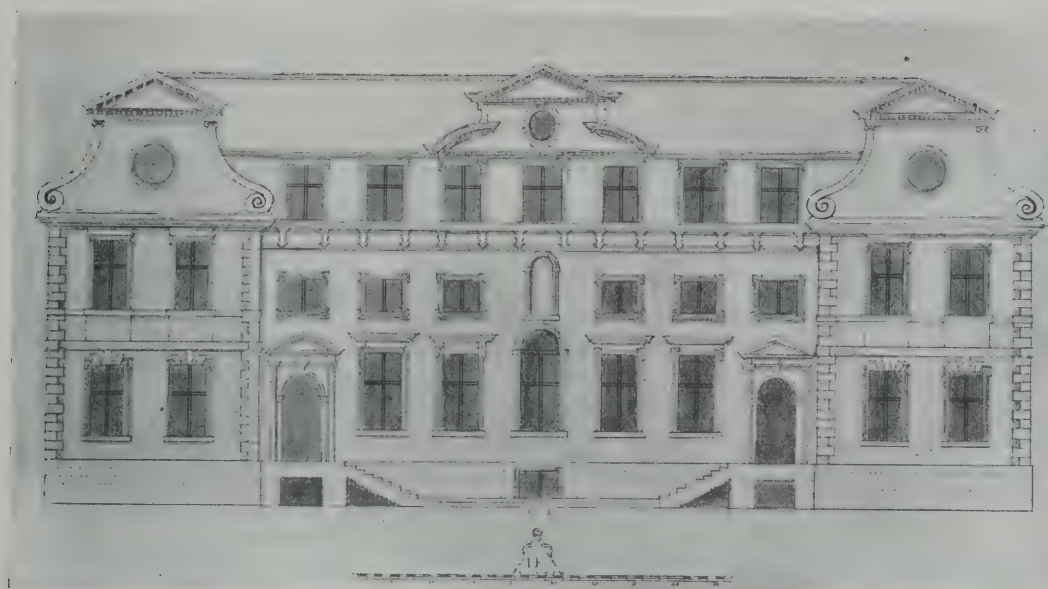
## Contents for 14 August 1926

	Page
RAYNHAM HALL, NORFOLK. Illustrated. By Sir Reginald Blomfield, R.A. . . . .	527
AN ARCHITECTURAL HISTORY OF THE BANK OF ENGLAND : Part II. Illustrated. By H. Rooksby Steele . . . .	530
STONE DECAY AND THE PRESERVATION OF ANCIENT MONUMENTS : No. III. By Professor A. P. Laurie . . . .	538
REVIEWS :	
A WAYFARER IN EGYPT. By D. T. F. . . . .	539
OLD DOMESTIC ARCHITECTURE OF HOLLAND. By I. M. Chambers . . . . .	539
THE SMALLER ENGLISH HOUSE OF THE LATER RENAISSANCE 1660-1830. By Professor Frank Granger . . . .	540
ALLIED SOCIETIES :	
NATAL INSTITUTE OF ARCHITECTS . . . . .	541
YORK AND EAST YORKSHIRE ARCHITECTURAL SOCIETY . . . . .	541
OBITUARY :	
PROFESSOR CHARLES GOURLAY. By Alex McGibbon . . . . .	542
SAMUEL BOLTON ASHWORTH . . . . .	542
ROBERT DIXON . . . . .	542
R.I.B.A. GARDEN PARTY . . . . .	543
LONDON BRIDGES : ROYAL COMMISSION . . . . .	543
ASHMOLEAN MUSEUM, OXFORD . . . . .	543
ROYAL SOCIETY OF ARTS . . . . .	543
NOTES FROM MINUTES OF COUNCIL . . . . .	544
NOTICES, ETC. . . . .	546
BOARD OF ARCHITECTURAL EDUCATION . . . . .	547
EXAMINATIONS . . . . .	548
COMPETITIONS . . . . .	551
MEMBERS' COLUMN . . . . .	551



RAYNHAM HALL, NORFOLK  
From a Drawing by Sir Reginald Blomfield, R.A.





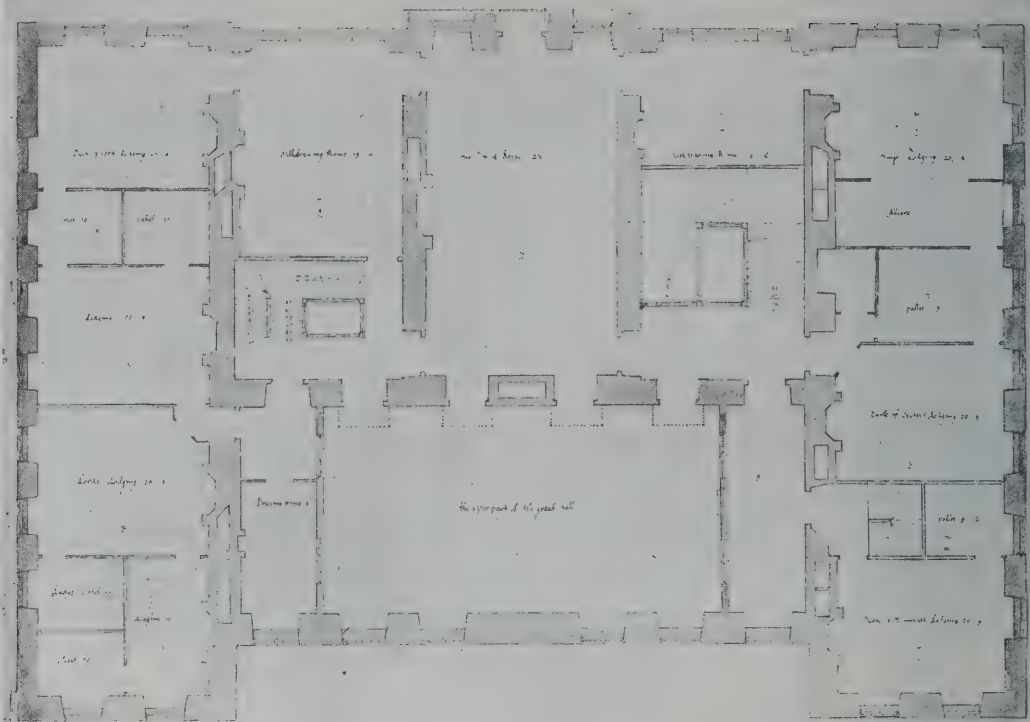
RAYNHAM HALL, SOUTH ELEVATION

## Raynham Hall, Norfolk

BY SIR REGINALD BLOMFIELD, R.A.

**M**R. LEONARD BOLINGBROKE, F.S.A., has presented to the R.I.B.A. Library a very interesting set of ten architectural drawings of Raynham, made before 1685. The drawings, mounted on linen and bound in vellum, measure 21 inches by 16 inches, and consist of plans, elevations and sections of the house as it was at the time the drawings were made. On the drawing of the south elevation there is a scale of feet ( $\frac{1}{8}$  inch to 1 foot) and the initials "J. E." inside a pair of compasses. The drawing of the sections and elevations is so crude and the spelling so erratic that I think these drawings must be taken to be surveys of an existing building, probably made by a builder. They are not the original drawings of the house. "Little parlour" is spelt "Letel parlar," "Duke" becomes "Duck," and "Evidence Room" is spelt "Everedence ROME." The date is probably about 1680, as in the south-east corner of the first floor a room is marked "Duck of Monmouth's Lodging," and the Duke of Monmouth's rising and his execution took place in 1685. It is possible that the survey was made on the occasion of some Royal visit, as the rooms at the north-east and north-west corners are respectively marked "Duck of York Lodging" and "King's Lodging," and between them was lodged the Earl of Exeter. The plan of the house at this date differed in several

details from the plan as it now exists, and these drawings clear up one point which has always puzzled me, and that is the date of the existing entrance doorway. They prove conclusively that this doorway was not designed by Inigo Jones, or whoever was the original architect, but was added after 1685. As will be seen from the plan, the original entrance was not in the centre. There were two entrances, at the end of the central recess, opening on to corridors 9 feet wide at either end of the great hall, and separated from it by wooden screens. Two wide steps led up from the forecourt, and eight more steps up to the entrances. In the house as it now exists the entrance is in the centre of the hall, with nine steps up in two flights. What is now the drawing-room is shown on the plan as the chapel. Prior to 1685 the west wing contained the upper part of the kitchen, pantry, "letel parlar" and "closet." These have been cleared away, and the wing is occupied by billiard-room, dining-room and a corridor between. The west staircase is in its original position, but the principal staircase on the east side of the chapel, and a subsidiary staircase to the first-floor bedrooms, were removed when this part of the house was remodelled, probably in the early part of the eighteenth century. Both staircases were lit by lantern windows ("strick lights" they are called on the plans) with north lights



FIRST FLOOR PLAN



GROUND PLAN

RAYNHAM HALL

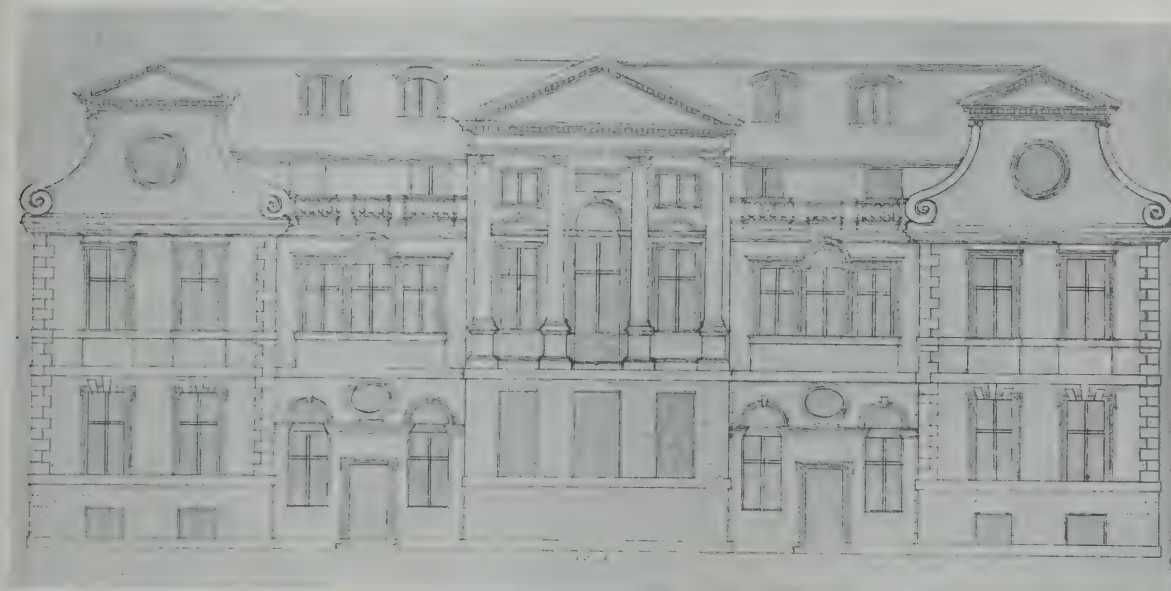


above the leads. In the old house the dining-room was on the first floor, with balconies looking down into the great hall. The flues shown on the first-floor plan vary between 5 feet 6 inches by 18 inches to 3 feet by 18 inches, and instead of gathering over above the fireplace, the seventeenth-century builders tapered up from the full width of chimney openings to flues of about 18 inches square in the stack above the roof.

On the north elevation the centre bay with engaged Ionic columns, and the wings with their characteristic gables, are part of the original design; but the parts between the centre bay and the wings are subsequent to 1685, and I think the architect who remodelled the house improved the design. The east elevation is as it was, except that a new garden entrance was formed. The very feeble dormers on this side appear to be modern. The window openings do not appear to have been altered from the original design, except on the

north side, and except that sash windows were substituted for mullions and transomes.

The drawings are of considerable historical value, because they help to disentangle the dates of the building. Personally, I never believed the existing entrance to be part of the original design. On the other hand, it is surprising, to me at any rate, to find that the pediment and engaged Ionic columns on the north side are part of the original design, though the windows were lengthened after 1685. The string course above ground floor, the key blocks of the straight window arches, and the flight of steps are all later than that date. The building is always attributed, and probably rightly, to Inigo Jones, and if, as is supposed, it was erected 1630-36, it is an astonishing example of his genius. A comparison of Raynham with Swatley Hall, near Uxbridge, or Broome Park in Kent, will show the difference between the artist of first-rate ability and the merely competent practitioner.



RAYNHAM HALL, NORTH ELEVATION

# An Architectural History of the Bank of England

## Part II

BY H. ROOKSBY STEELE [A.].

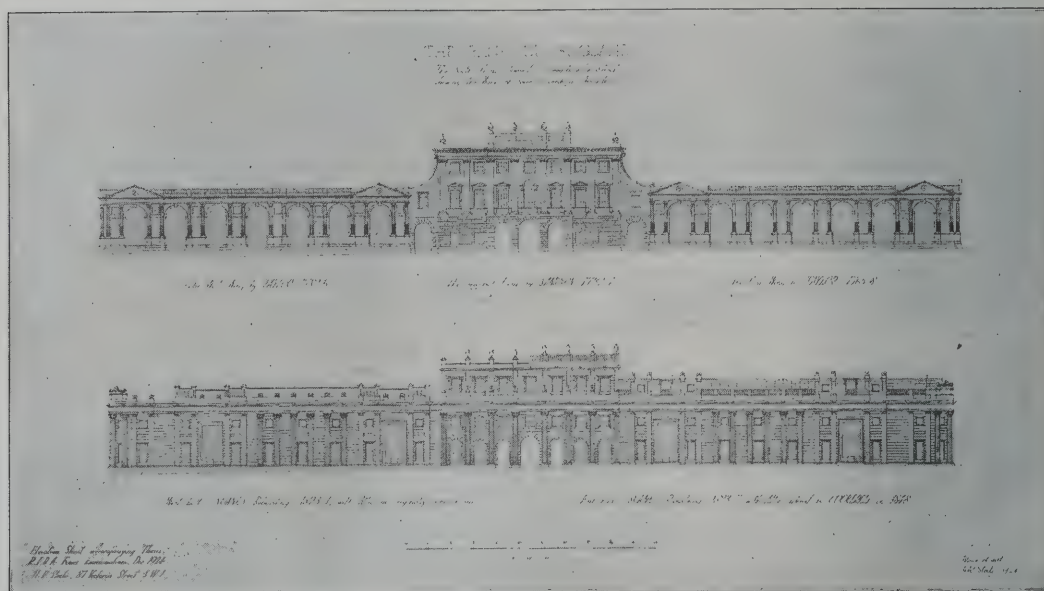


FIG. 17.—THE EVOLUTION OF THE SOUTH FRONT

The upper drawing shows Sampson's entrance façade flanked by Taylor's blank walls, whilst the lower is Soane's reconstruction before and after alterations by Cockerell

### CHAPTER IV.

#### THE THIRD ARCHITECT—SIR JOHN SOANE: 1753-1837. FIRST PERIOD: 1788-1800.

The story of Soane is a romance. Born of poor parents—his father was a journeyman bricklayer—his genius and "infinite capacity for taking pains" brought him early in life in touch with the great men in the world of architecture and even, through an introduction by Sir William Chambers, into contact with his Sovereign George III. Soane gained, in 1772 and 1776 respectively, both the Silver and Gold Medals at the R.A. and the King nominated him travelling student of that Institution. In this way he visited Rome and many other cities in Italy, measuring assiduously and producing designs of his own. The evidence which he saw there of the constructive ability of the ancient Romans was a great influence in his practical work to come. The Greek tendency in decoration which is shown in his executed designs must be attributed more to the example of his established contemporaries than to a first-hand knowledge of Greek architecture, for of the latter Soane saw no more than the rather crude colonial work at Pæstum and in Sicily.

By the time of Taylor's death Soane had returned from Italy, published a book of designs (incidentally

adding the "e" to the end of his name in the process) and started in practice for himself. The influence of Thomas Pitt, afterwards Lord Camelford, brought his name forward as a candidate for appointment as Bank architect: he was chosen from a field of competitors and began his duties on 16 October 1788, barely three weeks after the demise of Taylor. The appointment was undoubtedly the chief landmark of his career: it was to provide him with continuous employment for the next 45 years and establish his name firmly in the annals of architecture.

Soane's first concern was a detailed survey and inspection of the existing buildings, with the help of the young Dance, his first master, and Milne. His attention was at once drawn to the precarious condition of much of Taylor's superstructure: the weather had been getting in under the lead on the roofs and many of the main timbers were rotted at their bearings. The worst example was the Bank Stock Office, on the north side of the Bartholomew Lane Vestibule. For this Soane proposed a new roof of fireproof materials, resting on stone piers, replacing the wooden columns of Taylor, and he prepared plans and models to illustrate the change. The Directors approved his scheme and during the years 1792-3 the whole office was rebuilt from the ground floor upwards, whilst a basement under was excavated



and vaulted in brickwork (Fig. 18). This was the first work of any magnitude undertaken by Soane at the Bank: in the first four years of his appointment he had done minor alterations such as putting a new elliptical lantern over Taylor's Dividend Warrant Office and re-fronting the latter's Barracks, whilst general maintenance work was also in hand. That he was contemplating, during this early period, other improvements is shown by two sets of sketch designs in the Soane Museum. The one (dated 1790) for a new arcaded wall at the east end of the Garden Court indicates that Soane felt the disproportion that existed here between Sampson's and

glazed in each of its twelve sides. A point worthy of note is that the lantern was set some three feet outward from the lip of the eye, thus leaving a substantial ledge for a window-cleaner to work from. This provision was always made by Soane wherever a lantern was difficult of access from the floor.

The north and south segmental arches were prolonged as vaults to the ends of the office, each being intersected by a cross-vault of parabolic section. Down each side of the room was an aisle, divided into three by low arches connecting the piers with the wall, the centre compartment rising to a vault, which was a continuation of the



FIG. 18.—THE BANK STOCK OFFICE

This was the first hall to be built by Soane in replacement of Taylor's work. Now demolished

Taylor's work (Fig. 16), and sought to remedy it with a composition similar in style and scale to the latter's. The other design, made on 11 November 1791, is a tentative proposal for a new external wall to replace Taylor's, the treatment being in the severe "Newgate" manner, with Doric end features. Neither of these ideas got beyond the drawing-board stage.

The new Bank Stock Office was a striking essay in construction. Whereas Taylor had used sixteen columns to hold up his roof, Soane concentrated his weight on four stone piers, each no bigger in section than one of the pedestals that had carried the columns. From the piers, which stood 26 feet apart in the centre of the room, four segmental arches took the weight of a shallow dome, pendentives developing from the latter between each pair of arches. The dome was truncated to form a large eye 20 feet in diameter, over which was an iron lantern

segmental arch under the dome, and the side compartments roofed with semi-circular barrels, which were low enough to permit of end lights over in the cross-vaulted section. A small aperture at the crown of each barrel, covered with a single sheet of heavy glass, completed the natural lighting arrangements.

Such comparatively slender supports as the piers would not have been possible had not the dome and vaults been largely constructed with hollow earthenware "pots." Each pot was  $7\frac{1}{2}$  inches high, with a base  $4\frac{1}{4}$  inches square, which changed into circular section at the top: both ends were sealed, except for a vent-hole in the round one, which was placed towards the "centre of generation."

This mode of lightening the superstructure was analogous to that employed at Ravenna, in Byzantine times, for the dome of the Baptistry.

In addition to the stone used in the piers this material was employed for other vital parts, such as the springing points of the vaults and rim of the "eye." To bind the latter securely together square iron rods, connected with single links, were sunk in the stone flush with the flat upper surface. From the links radiating rods were carried down into the construction of the dome and there

incised lines, square in section and arrangement, predominated, and the whole was picked out in strong colour. Soane's taste for this rather vivid decoration toned down in later years, when "yellow stone colour" and more delicate tints were applied in the internal finishings at the Bank. He always objected to dead white in ceilings and walls as reflecting too cold a light



FIG. 19.—1799. SOANE'S FIRST ADDITIONS  
Plan prepared by Cockerell to illustrate the development of the Bank

anchored. Rods were also placed longitudinally in the thickness of the vaults to hold in their ends and under the stone-flagged floor to tie-in the feet of the piers. The roof of the lantern light was covered with copper: the remaining roofs, which were flat and laid to falls, consisted of a "rendering" over large "quarry" tiles supported on brick sleeper walls and covered with sheets of 9 lb. lead, joined by hollow rolls.

The internal walls, vaults and dome were plastered:

and sometimes used coloured glazing as a further help in producing a warm and mellow effect.

The first actual "additions" that Soane made to the Bank were in the triangular yard next the bend in old Princes Street, and on land adjoining to the north, where part of Catharine Court was absorbed. Cockerell's plan (Fig. 19), representing the progress made by 1799, is incorrect in showing this yard bare of buildings, for it is certain that here Soane erected between 1792-4 new



and much larger rooms for the Governor and Deputy alongside the apartments Taylor had given them, as well as a large domed office in the apex of the triangle. When the Governor's Court, on which these rooms looked, was formed in 1804 their outer walls were thickened and redesigned, a fact which became evident during recent survey by the finding of two distinct, though attached, walls in the north side of the vault

had become reality: the houses were pulled down and by 1794 Soane had prepared a scheme for ten residences in their place to accommodate certain of the Bank officials. These, however, were not built; instead, Soane hurriedly erected his famous screen wall round the limits of the new site as a means of protection and left the Directors to make up their minds as to how the interior was to be utilised. This was Soane's first appear-



FIG. 20.—THE NORTH FRONT OF THE BANK  
A Malton drawing of 1797 showing the original length of the Lothbury wall

under the Governor's and Deputy's rooms. On the land where Catharine's Court had existed, and abutting on the west end of Taylor's library, a fine top-lit domed hall was provided for the Secretary.

In 1792 the Haines estate in Lothbury was purchased. This was a mass of courts and small property extending from Bartholomew Lane to Princes Street and reaching back to the then northern boundary of the Bank (Fig. 13). By this acquisition the Directors' dream of an island site

ance in public, so to speak, and his initial offering met with a mixed reception: Pugin and Britton record that it confounded the critics in its departure from the accepted rules of design and they (the critics) called it fanciful.

The new wall (Fig. 20) was a broad adaptation of the Temple of Vesta at Tivoli, which Soane had measured during his Italian visit. This Roman Temple was, of course, circular on plan, having a range of eighteen Corinthian columns encircling its cella. Soane reproduced

the "order" almost exactly: the circular effect was obtained by connecting each end of the Lothbury front to the returns down Bartholomew Lane and old Princes Street with a curved wall having two columns "in antæ" set before it and supporting the round-swept entablature. Before entering on the curve the plain walling of each street was stopped by an "anta," which formed a pair with its fellow confronting one of the columns.

The general treatment of the whole wall was exceedingly restrained, consisting of a plain vertically-tooled podium between 7 and 8 feet high, on top of which the base mould of the columns was run as a footing for the wall proper. The latter was simply eighteen courses of Portland stone, divided horizontally by plain square rustications, the vertical joints being unmarked and made as fine as possible. Above the ashlar was the stronglined cornice, tailed down by a blocking on which carved stone honeysuckle ornaments were set at intervals. That the blank windows, which now break up the surface, were not put in the wall at the time of its building, but added when the Lothbury front was doubled, is proved by Malton's drawing (Fig. 20), and further corroborated by the fact that, unlike all the later recesses, those on either side of the entrance to the Lothbury Court are still without the blank windows.

This entrance was provided for the passage of vans bringing in and taking out bullion (superseding Taylor's gateway in Bartholomew Lane, which disappeared in the building of the new screen wall) and was placed in the centre of the Lothbury front. It was a semi-circular headed opening framed in a square architrave which was capped by a pediment. In the semi-circle was a wrought iron grille radiating fanwise from a cast-iron lion's head at the centre: the lower part of the opening was closed by a pair of heavy folding doors made up of two thicknesses of wood with an iron plate between, the whole being clamped together with stout coach screws. On either side of the doorway was a recess accommodating a pair of columns "in antæ," the entablature breaking forward five inches from the general face to run unbrokenly over both recesses and doorway. Above each recess was a flatly-treated "tower" (as Cockerell's description goes) bearing a characteristic Soane scroll on its summit. A plain piece of walling, set four feet back, connected the two towers.

Immediately behind the wall, at the Bullion Entrance, Soane built a lodge, the severely-designed south wall of which now forms one side of the famous Lothbury Court. In the upper rooms over the driveway he had an office, which was chiefly used by William Payne, the clerk of works, whom he employed during the whole time of his connection with the Bank. The lodge was the only part on the new site built concurrently with the outer wall: by 1796 however, additional rooms had been added to the westward of it behind Lothbury and Princes Street, forming the acute angle of what was to become the Residence Courtyard. About the same time, Taylor's Library and the rooms between it and the Bullion Court were demolished, and by October, in 1797, Soane was able to lay before the Directors a scheme for the completion of all that part of the Bank that lay between his screen wall and the work of his predecessors. The plan was approved and forthwith put into execution.

The chief feature of the layout was the Lothbury Court, placed on the axis of the entrance from Lothbury (Fig. 21). Fortunately Soane realised the dullness of his already-existing lodge front and did not attempt to repeat it on all sides, but conceived an entirely fresh treatment which produced such a splendid effect. On entering from the street one was confronted with a triumphal arch based on that of Constantine at Rome, but differing from it in one important respect in that the two flanking arches were omitted and the outer intercolumniations reduced, each pair of columns resting on a common podium. Where the smaller arches would have been, two blank windows were placed, and over them sculptured reliefs picturing "Morning" and "Night," by Thomas Banks, R.A. (Twenty years later plaster casts were made from these reliefs and fixed on the pendentives of the Old Dividend Office, then undergoing reconstruction.) As in the Arch of Constantine the entablature broke forward over the four columns to support statues, in this case female figures of "Coade-stone"—representing Europe, Asia, Africa and America. Above the windowless attic Soane intended to place a central group of statuary, but it never materialised. Two large windows, with semi-circular heads springing from the same line as the main arch, completed the south wall of the Court.

At the East and West ends, approached up broad flights of steps, were single rows of four columns, at the same level and of the same height as those to the triumphal arch. Behind the Eastern colonnade was a semi-circular apse, three intercolumniations wide, the semi-dome over which was constructed with the earthenware "pots" and had its soffite plastered in imitation of stone, with incised decoration. The Western colonnade was merely a screen dividing the Lothbury Court from the Residence Courtyard. The same entablature that surmounted the arch was carried over both ranges of columns and also round the walls of the latter courtyard above flat antæ: in detail it differed from that used in the "street" order in having modillions between cornice and frieze and a curved junction between the latter and the top member of the architrave. The columns were 23 feet 6 inches high as against 23 feet 4½ inches in the external order: their capitals, flutes and bases were identical and they stood at the same level relative to datum.

The axis of the entrance in Lothbury was prolonged through the "Triumphal" archway by a stone barrel-vaulted "tunnel" into the Bullion Yard. The north wall of this yard had been removed by Soane in 1796, and he now replaced it with a concave curve, the centre of which coincided with the crossing of the Lothbury axis and the north-and-south axis of the yard. The curved wall had three arched openings in it at ground-floor level, the easternmost being the termination of the "tunnel": the other two were glazed, as windows to what is now the Chief Cashier's private office. Stone was used for facing up to a line above the three arches, after which stock bricks, combined with stone window dressings, were utilised. The same treatment was applied to the rest of the Bullion Yard a few years later, when the Bullion Office, on the east side, was reconstructed by Soane.

An interesting room which belongs to the Lothbury Court period is the Chief Cashier's public office, lying



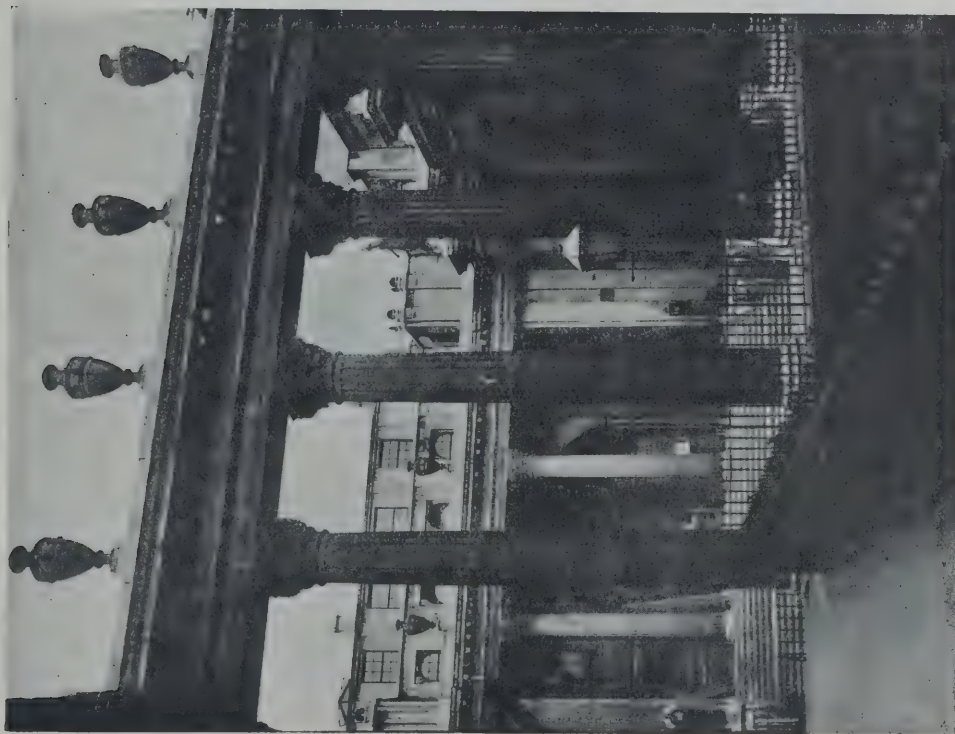


FIG. 21.—THE LOTHBURY COURTYARD  
The upper windowed attic is modern

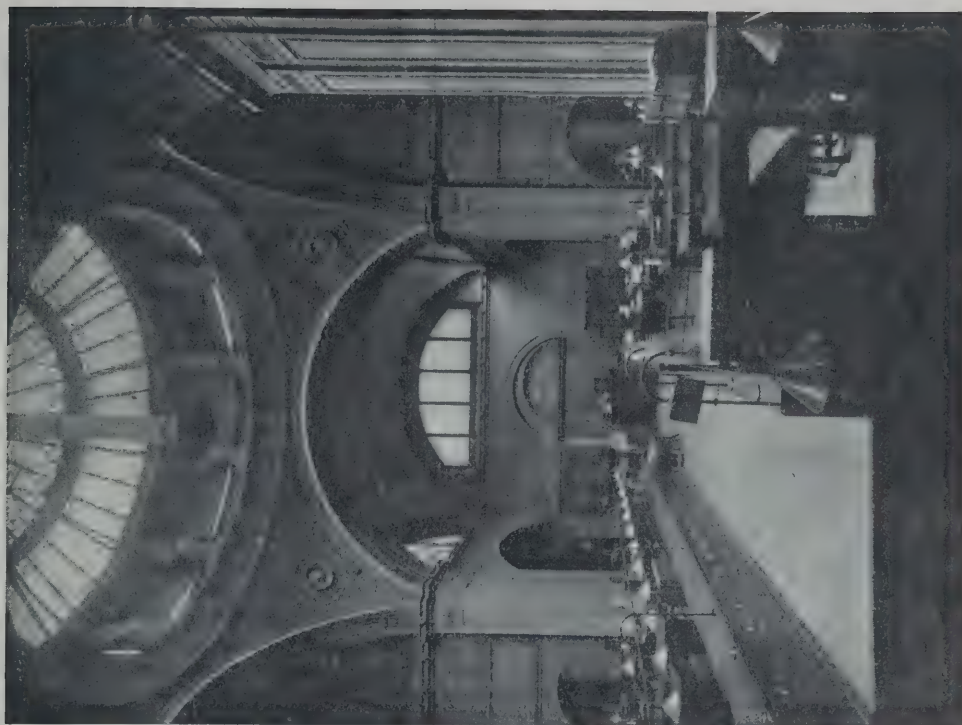


FIG. 22.—THE CONSOLS OFFICE  
The Caryatides are of "Patent Stone" and apparently from the same mould as others in the lanterns of the Rotunda and Old Dividend Office

between this court and his private room overlooking the Bullion Yard. The internal wall surface was panelled in wood: the panels flush with style and rail and so carefully put together that, with a covering of paint, the joints are invisible except in a strong light. It is said that the object

provided. One design in the Soane Museum shows the Library with semi-circular ends, but as built these were made square. Modern improvements at the beginning of the present century necessitated its removal.

One of the last buildings to be erected in connection

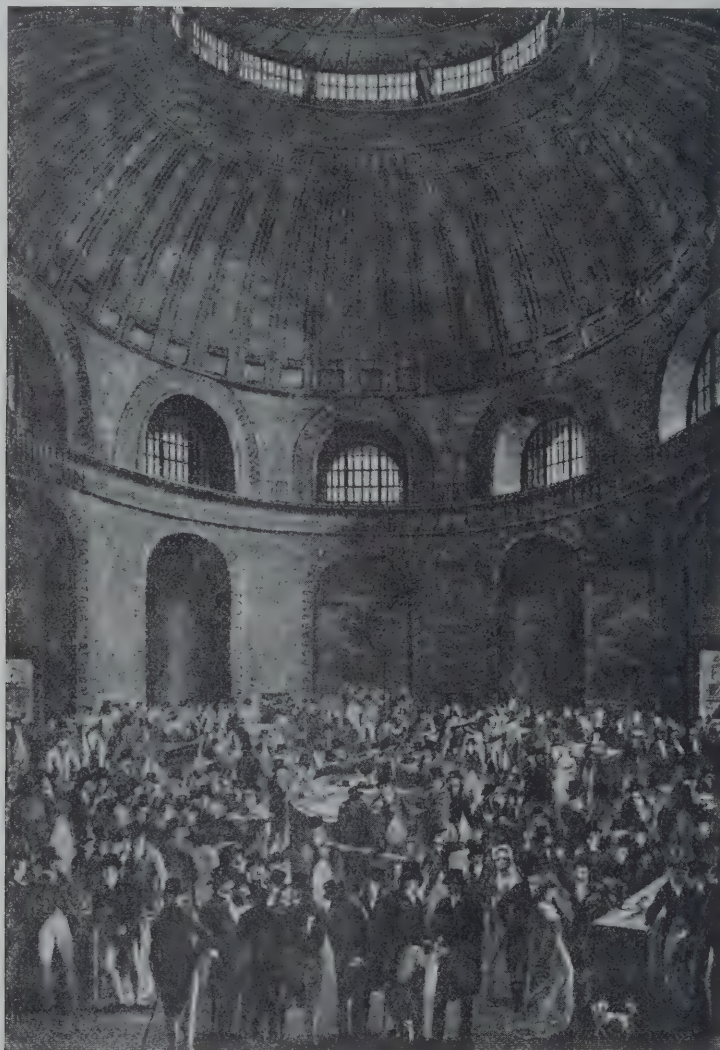


FIG. 23.—SOANE'S ROTUNDA

An old drawing of 1804 when the Rotunda was in use by dealers in the Funds. It has now been pulled down

of this wooden skin was to make the office—a large room 47 by 29 feet—warmer for the clerks.

To replace Taylor's demolished Library, Soane erected another in the angle between Lothbury and Bartholomew Lane (1798-9). The new building, consisting of four storeys all cross vaulted in brick, was almost a replica of Taylor's, even down to the number and arrangement of the supporting piers and the amount of storage space

with the Lothbury Court extensions was the Consols Transfer Office, 1798-9 (Fig. 22). This was situated between the new Library and Taylor's Stock Offices, and was the largest hall built by Soane at the Bank, having an extent on plan of 82 by 50 feet. The same scheme that had been applied to the reconstructed Bank Stock Office, with four piers carrying a truncated dome and attendant vaults, was utilised here, though on a larger scale. The



greater height was an advantage : the older hall and others like it round the Rotunda suffered from being somewhat too "squat" in appearance. This squatness was still further accentuated in modern times by the counters having been moved from their original positions between the piers, towards the centres of the halls, thus leading one to judge the height from counter tops instead of from the floor of the former large public spaces.

Soon after the reconstruction of the Bank Stock Office and before the Haines estate site had begun to be developed, Soane decided that both Taylor's Rotunda (Fig. 9) and the hall to the north of it required rebuilding. Their wooden roofs were in a bad state due to the percolation of water, and in 1795 he had them removed, together with all their supports that were of a combustible nature.

The walls of the old Rotunda, consisting of a brick core with a casing, inside and out, of stone, were allowed to remain. During the recent demolition the inside casing was disclosed and it was found to have a finish usually given to external stonework and had coarse rustications at the joints. This led to the interesting supposition that Taylor designed the Rotunda originally as a circular open court and had actually completed the wall of it before the decision to put on a covering dome had been arrived at. The rustications, as found, would have been completely out of scale, and it is thought that they were enlarged from a normal size to take the wooden "grounds" on to which the eventual lath and plaster wall finish was fixed. Soane stripped off this plasterwork and built a new stone "skin" about two feet thick against the old stone surface and bonded with it : this accounts for his Rotunda being about four feet less in diameter than Taylor's. Similarly, the curved and flat recesses of the latter, though retained, became less in size by reason of the new "skin" which was added to them.

Up to an arcaded band at the springing of the dome, the wall decoration was confined to an incised meander which followed the outlines of the recesses and changed into a fret over doorways and cupboards. A vertically-tooled dado 4 feet high and a simple fireplace in each of the four round-backed recesses were the only other elements in a singularly bare composition (Fig. 23).

At the level of the dome springing, 30 feet above the floor, were eight lunettes, placed over the arched recesses. The plan externally changed at this point from the square into an octagon, so as to bring the four diagonally-placed lunettes within reasonable distance of the light. Above the voussioired heads of the lunettes a course of through-stones circled the dome. Their backs inclined inward to form the springing for two-inch bricks, laid  $2\frac{1}{2}$  bricks thick

to commence with, and thinning to  $1\frac{1}{2}$  bricks by the time a second ring of through-stones, halfway up the dome, was encountered. Externally, between the two stone courses, the bricks were covered by six courses of stone steppings, diminishing in size as they rose.

A recent examination of the halfway stone ring revealed a square-sectioned iron tie-rod embedded within it, and also showed how the joints between the stones were secured by running lead into a cavity formed by opposing vee-grooves. Above this ring two rows of "pots," with lacing courses of brick and occasional stone headers, completed the dome up to the stone eye of the lantern. The whole of the external surface from the lantern down to the octagonal supporting wall was covered with nine-pound lead. Inside, from the heads of the lunettes to the stone eye, the surface was plastered with a shallow-fluted motif terminating in the ever-recurring "key" pattern. A curious dark band could be seen running right round this plaster work at the level of the halfway through-stones : it was caused by the extra power of condensation in the stone over that in the adjoining bricks and "pots." The whole of the interior was painted in sober colours.

The lantern of the Rotunda had twelve sides, all glazed. (The top-lighting now found in most of the Soane lanterns is not his work ; neither are the large sunburners which depend from their centres.) The flat-pitched roof, in the centre of which a large wind-dial was originally fixed, was ostensibly carried by twelve life-size Caryatides, standing on the eye of the dome  $58\frac{1}{2}$  feet above the floor, but actually supported on the stone pilasters between the glazed sides. A certain bracing effect however was obtained by passing an iron rod up the hollow-centre of each figure, attached at the top to the iron roof and at the bottom to the iron tie let in the ledge of the eye.

Coade was responsible for the making of the figures in his "Patent Stone" and for twelve other similar ones used in the lantern of the Consols Office.

In the reconstruction of the hall to the north of the Rotunda, now called the Old Shutting Room, the Bank Stock model was again followed, but with a lighter and more airy touch. It is perhaps the plainest, in the matter of decoration, of all the Soane rooms. Both this hall and its simple and dignified contemporary, the Rotunda, were finished by 1796, two years before the more elaborate Consols Office was begun.

The Rotunda was used by dealers in stocks till 1838, when Mr. Curtis, Governor at the time, had them turned out owing to the interference with the Bank's business which they caused.

(To be continued)

# Stone Decay and the Preservation of Ancient Monuments

By PROFESSOR A. P. LAURIE.

No. III.

In the second article we discussed some remarkable instances of the destruction of stone and brick by the crystallisation within it of sulphate of lime which had originated in the mortar, and found that this was due to the fact that when the wall surface had been soaked with rain and was drying out the brick or stone had been evaporating faster than the mortar and had drawn water containing sulphate of lime in solution from the mortar into the brick or stone, where it had crystallised.

Incidentally, in the course of the enquiry the danger of common salt which stimulates the action of the sulphur acids in the air was demonstrated. It has long been known that a sand containing salt is apt to produce a damp building, but this new danger of using it in restoring ancient monuments is of practical importance, as it will stimulate the attack on both limestones and calcareous sandstones.

To return to our main subject, the rate of evaporation from stone and mortar respectively, there are certain practical conclusions to be drawn for the guidance of those engaged in repairing and restoring ancient buildings.

In the first place, I think it is evident that Portland cement forms too dense a mortar for the final pointing of brick or sandstone, though in the case of a very close-grained limestone, like the limestone of which Lincoln Cathedral is built, Portland cement forms an excellent pointing material, one of the two West Towers, which was pointed some 40 years ago, being in excellent condition.

Portland cement is quite suitable for internal grouting and pointing, but for the last two or three inches either a sand-lime mortar should be used, or a certain amount of crushed brick introduced in place of sand if Portland cement is used instead of lime. It is interesting in this connection to know that one of our most experienced men in connection with building in Scotland is of the opinion that Portland cement is not safe when used to point sandstones.

The relative merits of a fat lime and an hydraulic lime require investigation. It is probable that the custom of the Office of Works of washing down the surface of their pointing, instead of finishing with a smooth face laid on with a trowel, is sound from the point of view we have been discussing.

In the case of ancient buildings which have been pointed in the past with Portland cement, I fear that evidence is very much against it, and that, in some cases, there is a rapid decay taking place of ancient

mouldings and carvings, the Portland cement proving more injurious than hundreds of years of ordinary weathering.

A considerable part of older Edinburgh is built of Craighleith sandstone, which is a highly silicious sandstone, and therefore resists of itself the attack of sulphur acids. Where dressed stones and fine joints were used, it used to be the custom to do the final pointing with masons' putty, which, containing linseed oil, made an insoluble pointing which would not be attacked by acids, while in the case of the rougher work an ordinary fat lime mortar was used. This was a sound practice, as in the case of a sandstone or brick which is able to resist of itself the attacks of the sulphur acids the mortar should either be quite insoluble or should be freely evaporating. There is no objection to the thorough tamping and working in of mortar, where an ancient building is being restored, as long as the last two or three inches are not too dense, and experiments are evidently required on various mixtures of mortar, cements, and aggregates in order to determine their rates of evaporation as compared with ordinary stone and brick.

The most interesting result obtained from my experiments is that for the first time there is a suggestion of a rational way to use a stone preservative. A good stone preservative should not cause any permanent discoloration of the stone, should be itself practically indestructible, should act as a glue cementing the particles of stone or brick together, and should have some value as a protective agent. Such a preservative will, at any rate, delay decay, and will do something to bind together a crumbling surface, but it is evident that where we have to deal with surfaces where there is a considerable ratio of mortar to brick or stone, it can serve a much more valuable purpose.

In the last article I described an experiment with sandstone, showing how the direction of the flow of water while drying out could be controlled by the size of the pores. These results were confirmed for sandstone, brick, limestone, and combinations of brick and mortar. The size of the pores can be controlled in different ways. For instance, in the case of limestones I used magnesium silicofluoride for the purpose and obtained similar results.

The danger is that in the case of old stone or brick long exposed to the weather the surface is porous, and as long as we have the old pointing which is crumbling with age we are dealing with an equally porous material, but the new pointing may upset the



balance of evaporation. The use of a suitable preservative enables us to control this matter, and arrange that the evaporation of the stone or brick is slower than that of the mortar, and therefore the tendency will be to draw salts, which would otherwise crystallise within and break up the brick or stone, into the mortar.

Evidently if the whole surface is treated with a preservative, we shall not do very much good as the rate of evaporation of the whole surface is lowered, but if, having raked out the joints, we then treat the surface with a suitable preservative, spraying not only the surface, but within the open joints, and then repoint with a sufficiently open mortar, we should be able to establish conditions which should prevent future crystallisation of sulphate of lime within the brick or stone.

While, therefore, little light is thrown on the treatment of large stone surfaces by these experiments, very definite conditions are laid down for the treatment of old brick walls, and old buildings where there is a fair amount of mortar surface exposed.

It is evident, in the case of some old buildings I have examined, that modern rapid decay is starting from the joints and spreading downwards and upwards from them, and it is at these places that sulphate of lime is found to be present in considerable quantities. If, then, these joints are raked out, and the whole sprayed with a suitable preservative and then repointed, we can establish conditions which should protect for long periods the surface of the stone from serious decay.

In the case of crumbling old brick walls and very crumbling stone surfaces it may be necessary to spray with a preservative before raking out the joints, merely to hold the rotten surfaces together. The joints being then raked out, the spraying should be repeated, more especially into the joints, before repointing.

All valuable buildings and ancient monuments which have been repointed within the last twenty years should be examined, and if there are signs of rapid decay, the joints raked out and the buildings treated in this way.

## The Library

MUSEUM KUNST DER RENAISSANCE IN FRANKREICH UND DEUTSCHLAND. By Dr. Albrecht Haupt. Vol. 1. 4to. Berlin 1923. 10s. [Berlin: Neubabelsberg Akademische Verlagsgesellschaft Athenaion, M.B.H.]

The second volume of this learned work is already in the Institute Library. Volume 1, which has now been added, gives an account of the Renaissance in France and Germany. It is not quite clear why the author limited his survey to these two countries, yet his method of classification enables him to pass under critical review a large number of buildings. There are over 200 illustrations in the text.

A. S. E.

## Reviews

A WAYFARER IN EGYPT. By Annie A. Quibell. [Methuen]. 8vo. Lond. 1925. 7s. 6d.

Mrs. Quibell's book is a sound one to take to Egypt when time permits of more than cursory glance at its amazing output; but apart from this general quality—which it possesses on account of the intimate first-hand knowledge of its author—the book has some things in it which are of uncommon interest to the student of Art. One illustration in particular, from the Sakkara chapter, is of supreme interest—the ruins of the third dynasty pyramid temple on plate VII. Here we see columns that might have been executed on the Athenian Acropolis in the 5th century B.C.; yet they may be some 3,000 years older than the Greek culmination.\* In a word, one need not go to Beni Hassan to find a true prototype of the Doric column; one sees rather, that unlike the Sakkara example, the Beni Hassan column has no resemblance to a round one and is based on quite a different principle. There is a most valuable chapter—"The Egyptian Museum"—devoted to the great collection at Cairo. Other sections deal with The Delta; The Pyramids; The Coptic Church; Cairo; Cairo and Luxor; Luxor (both banks); Luxor to Assuan; and Assuan to Abu Simbel. A map of Egypt, 16 good photographic plates and a useful bibliography all add to the attractiveness of this pleasantly-written and handy little book.

D. T. F.

OLD DOMESTIC ARCHITECTURE OF HOLLAND. Edited by F. R. Yerbury. [Architectural Press]. 4to. Lond. 1924. 25s.

This book is perhaps too spaciouly named, since in it Dutch domestic architecture is discussed only in a preface, and illustrated only with façades and interiors, unclassified as to type or period, and not with plans at all. There is no reason why these street façades, being simply flat screens, should not be considered independently, but a book limited to this consideration is not quite what the title suggests. Incidentally the illustrations are so emphatically its sole content that one feels they might better have been presented in portfolio form. To their quality no exception can be taken, the precise measured drawings of E. R. Jarrett, and the photographs of F. R. Yerbury being alike excellent, but against their arrangement it may be urged that to divide them into two distinct sections is to deprive each of a valuable relationship, since a constant turning to and fro is a process inviting omission. Besides, ranges of photographs, however good, are liable, without the relief of drawing or text, to be monotonous. The only text is an introduction by the architect, D. F. Slothoner. This, though necessarily slight in scope, serves to bring out the interesting character of Dutch architecture in general, and of these early 18th century houses in particular, which, distinctive in form, detail and texture, yet bear to contemporary English work a resemblance due in part to the accident of history but in part to an intrinsic likeness of climate and temperament.

I. M. CHAMBERS [A.]

\* Since writing this *The Times* has published an up-to-date account of the Sakkara excavations with a photograph of an avenue of columns, reeded, not fluted like those illustrated by Mrs. Quibell. (See *The Times* of Saturday, 16 January 1926.)

THE SMALLER ENGLISH HOUSE OF THE  
LATER RENAISSANCE 1660-1830. (By A. E.  
Richardson and H. Donaldson Eberlein. Published  
by B. T. Batsford, London.)

By Professor FRANK GRANGER [A.], D.Litt., M.A.

Professor Richardson and Mr. Eberlein have put together a very good collection and have succeeded in their object, which is to represent the small houses of the Augustan age of English architecture. In a pleasant commentary they trace some of the influences which went to the creation of these little masterpieces. After Wren, a stream of ideas came with Dutch William from Holland. The travellers who made the Grand Tour spread the ideas of Palladio. It was left to artists like Henry Holland to fuse these many streams into one. The climax comes, we are assured and by appropriate illustrations convinced, in the last ten years of the eighteenth century. For even of this picture book a judicious historical criticism forms the better part, and criticism and pictures together make a skeleton outline into which the reader can fit the Queen Anne and Georgian achievements of his own locality, such, for instance, as Newdigate House, Nottingham, in which Marshal Tallard spent part of his captivity.

Fortunately our local domestic architecture [Nottingham] of the period under review has been recorded in two ways. The late Mr. Harry Gill of this city contributed an excellent paper on the subject with illustrations to the Transactions of the Thoroton Society of 1907. And a Nottingham artist, Mr. T. W. Hammond, has devoted his brush and pencil for many years to recording the good work\* of the period, much of which has in the interval disappeared.

In fact we might compare the book before us to Vitruvius's *De Architectura* brought up to date. We are furnished with examples and with the architectural principles which explain them. Although few persons can trace the application of architectural principles to large undertakings, English people are as a rule sensitive to the charm of the eighteenth century house. The combination of elegance with economy—to use the germane phraseology of *Cranford*—can be traced in these pages—and this is important—by the layman who also happens to be a member of a local building authority. Few such persons could lay down this work without some benefit to that judgment which they are called upon to exercise in determining the architectural future of their surroundings.

But the architect has a responsibility and an opportunity even in the building of smaller houses. The delight of these Georgian buildings rested largely upon the arts subordinate to architecture, and upon work for which the architect was only indirectly responsible. The authors in occasional passages indicate

\* About to be published by J. and H. Bell, Nottingham, under the title : *Old and New Nottingham*.

the contribution of the craftsman to the whole design. Not only the wood carver and the worker in iron but even the marble mason drew upon his own invention without being entirely tied down to the architect's drawings. And here I will dare to hint a possible weakness in some of our English contemporary work of this kind, good as it is. The architect might with safety be content with providing only the background for the craftsman's art. A sketch or two would indicate to the skilful workman the limits within which he might exercise his power of creation in stone or wood or iron. But when the architect furnishes detailed drawings of ornament, the effect is presented only in two dimensions and the realisation tends to be correspondingly flat. Better than this is the florid effect stigmatised as baroque, rococo or plateresque, which comes when the craftsman is left to himself. The flatness which characterises schemes of decoration carried out by contractors and manufacturers of furniture, is much more flagrant than when the architect is employed, for they have staffs of workmen who work simply to pattern books.

As against all this, the note of the interiors which Professor Richardson and Mr. Eberlein illustrate, is the harmony of the general scheme combined with variety in detail. "The enduring freshness and elasticity of the classical tradition," to which the author refers, p. 171, checks our national tendency to the fantastic and the grotesque. The eighteenth century joiner could make in his country shop furniture only inferior to the masterpieces of Chippendale and Hepplewhite. Tribute might indeed have been paid to the influence of Wedgwood in familiarising the public through his pottery with the classical manner. It is curious how an occasional medallion in the familiar blue and white, brings with its three-dimensional effect a touch of the sculpture of Flaxman. It was the misfortune of Flaxman's age that his genius was never employed on a large scale in executing the reliefs for a great structure: it is a characteristic compensation that the inventions of Wedgwood made it possible for our smaller English houses to express the Greek Renaissance (as interpreted by Flaxman) in the jasper plaques of the potter.

The eighteenth century architect, then, was a master craftsman assigning within the limits of his design the tasks which he delegated to others as subordinate masters. A public with its taste disciplined by these domestic surroundings was less likely to go wrong in the control of larger works, the church, the town hall, the school. Professor Richardson and Mr. Eberlein are piecing together the threads in the book before us. But their task cannot be regarded as complete unless the architect of to-day calls in the individual artist in his several spheres to give a soul that shall harmonise with the smaller houses of the architect's clients.



## Allied Societies

### THE NATAL INSTITUTE OF ARCHITECTS.

The annual general meeting of the members of the above Institute was held in Durban on 26 April, 1926. The chair was taken by the President, Mr. H. E. Chick. There were also present Messrs. R. N. Jackson (Vice-President), F. J. Ing, B. V. Bartholomew, Col. Hurst, W. S. Payne, E. O. Payne, J. M. Powers, A. S. Frost, W. Barbour, and the Secretary F. H. Chaplin.

The President, in the course of summarising the work of the year, said:—

It is pleasing to record that the Institute has been consulted by various bodies during the year, and I feel sure we all desire to continue this service in the future, either by advising, co-operating, or by the appointment of one or more members to serve on various committees.

Your Vice-President, Mr. R. N. Jackson, has, at the instance of the Union Government, been appointed Overseas Correspondent of the Central Association of Architects of the Argentine Republic.

Col. Hurst represents this Institute on the New Council of the Natal Technical College.

Mr. F. J. Ing is chairman of the Building Trades Apprentices' Committee, which fact is, I think, a compliment to the profession.

Messrs. Paton and Bartholomew continue to serve on the Joint Advisory Committee appointed by the municipality, and Mr. Wallace Paton, F.R.I.B.A., was appointed by the municipality of Bethlehem to act as assessor in connection with new municipal buildings.

The most important subject dealt with during the year is the Union Registration Bill, which is now before Parliament. Messrs. Ing, Paton, Hurst, Payne and myself were appointed to act on the Provisional Council, and I had the honour of presenting your Institute before the Select Committee at Cape Town last month. It is gratifying to hear that the Select Committee have found that the preamble has been proved, and hope it will not be long before we hear that the Bill has successfully passed through Parliament.

In my opinion, the Registration Bill, whilst giving to qualified architects of the future the same professional status that is accorded to the other professions, will protect the public as much as, if not more than, the architect. It is in the public interest to prevent untrained and incompetent persons styling themselves architects from imposing upon the community. The only qualification at present required before a person may declare himself an architect is his ability to pay the yearly licence. It is pleasing to record that classes are being maintained at the Natal Technical College to provide facilities for the education of students desirous of entering the profession, and a Diploma Course is now being introduced so as to come into line with the other centres of the Union, and I trust members of this Institute will encourage the attendance of pupils and teachers at these classes.

One of the most important events which has taken place during the year is the amalgamation of the Royal Institute of British Architects and the Society of Architects. This fine achievement is bound to strengthen the profession throughout the British Commonwealth.

One or two architectural competitions have been banned during the year until brought into line with the R.I.B.A. rules and regulations.

Proposed amendments to the authorised Conditions of Contract Agreement have been considered, but up to the present the final draft has not been received from the Executive. Matters affecting the smoother workings of building contracts have been discussed with the Executive of the Master Builders' Association.

The Durban Corporation have formed a Town Planning Committee; Mr. Wallace Paton represents the profession on this committee. It is to be hoped that this committee will prove to be a real live body and that its recommendations will be carried out by the Town Council.

Three new members have joined the Institute during the year, which brings the roll up to twenty-four members and two Associates. Four applications for membership were refused owing to the applications not conforming to our bye-laws.

In conclusion, I wish to express my grateful thanks to Mr. T. H. Chaplin, our secretary and treasurer, for his valuable help. His able assistance has always been at my disposal, and has made my duty as President comparatively light.

The Council for the ensuing year were elected as follows: Messrs. R. N. Jackson (President), Wallace Paton (Vice-President), F. J. Ing, H. E. Chick, B. V. Bartholomew, E. M. Powers and W. S. Payne.

### YORK AND EAST YORKSHIRE ARCHITECTURAL SOCIETY.

#### VISIT TO CASTLE HOWARD.

Perfect weather added greatly to an enjoyable afternoon spent by the members of the above society from Hull and York on Saturday, 3 July, when, through the kindness of the Hon. Mr. Geoffrey Howard, they were enabled to see much of the interior, with its marbles, sculpture, paintings and other valuable works of art the collection of which has occupied centuries.

To Charles, third Earl (1672-1738), is due the erection of this palatial residence, upon a commanding site above the valley of the River Derwent, formerly occupied by the old Castle of Hinderkelfe.

Sir John Vanbrugh, then in the prime of life, prepared a plan, a copy of which may be seen in *Vitruvius Britannicus*, the greater portion of which was carried out before his death in 1726. The principal apartments face south, with north and south corridors connecting up to the great hall and staircases. Here are still to be seen the wall and ceiling decorations of Antonio Pellegrini. Beneath the dome is represented Phaeton falling from the clouds, and in the four angles between the soffits of the great arches are the four elements, Earth, Air, Fire, and Water.

A collection of antique busts and statuary is to be seen in the corridors, acquired by Henry, the fourth Earl. Here also are some valuable marbles.

The erection of Castle Howard is a notable achievement, as it was commenced in 1702 and carried on during the Wars of the Netherlands, as recorded upon the "Obelisk" at the cross roads from Slingsby, Terrington and Welburn.

A departure was made from Vanbrugh's design in the completion of the western wing, which was widened and the chapel placed across the wing, with the altar at the east end, abutting on to the north forecourt.

This is not enclosed, as was originally intended; neither are the stables attached, having been built close to the Obelisk. Here upon the cricket ground stand some old oaks which must date back to the time of Hinderkelfe.

The paintings which adorn the walls of Castle Howard are too numerous to describe. Some came from the collection of the Duc d'Orléans, at the Palais Royal, being acquired by Frederick, fifth Earl, after the French Revolution. One, in particular, "The Three Marys," by Annibale Carracci, is now in the National Gallery, Trafalgar Square, a gift to the nation but a loss to visitors to Castle Howard.

By the same artist are two fine landscapes, "Les Bateliers," and "La Chasse au Vol." "The Dukes of Ferrara," by Tintoretto, and "The Entombment of Christ," by Ludovico Carracci, are other notable pictures.

Many fine examples of the work of Sir Peter Lely exist, also family portraits, some by Jackson, the Yorkshire artist of Lastingham.

A view was obtained of the mausoleum, the work of Nicholas Hawksmoor. Here lie the remains of the third Earl, who was first buried in a vault in front of the altar of Bulmer Church, but removed 1745 to its present resting-place. It is therefore evident that the mausoleum was completed subsequent to 1738.

The following were among those present: Mr. J. M. Dossor (President) and Miss Dossor, Mr. and Mrs. J. Ferguson, Mr. E. A. Pollard (Hon. Treasurer) and Miss Pollard, Mr. and Mrs. K. Ward, Mr. and Mrs. J. Vause, Messrs. C. Bridgen, A. B. Burleigh, J. Dossor, Jun., G. Harbron, R. Jackson (Hon. Secretary), C. Leckenby, F. Porteous, J. E. Reid, J. S. Syme and J. Story.

## Obituary

PROFESSOR CHARLES GOURLAY [F.] B.Sc.,  
F.S.A. Scot.

Early in life he came to Glasgow and in 1882 entered on his architectural apprenticeship under Mr. Duncan MacNaughtan—and there began the acquaintanceship with the present writer; later we were colleagues. Thereafter he was draughtsman with Mr. James Chalmers, also of Glasgow. Soon he turned to teaching; in 1888 he was lecturer on building construction in the Glasgow Technical College and in 1895 appointed Professor of Architecture there. A year previously the educational resources of the College had been combined with those of the School of Art, where there were also classes in architecture, and thus was formed the Glasgow School of Architecture with a joint Diploma.

In 1887 he had become an Associate; in 1899 he took his degree of B.Sc., only in 1921 joining the Fellows of the R.I.B.A. In the early years the need was great of inexpensive helps in the teaching of architecture and of building construction by means of illustrative plates and text-books, so for his classes this was met by the publishing of plates of "Elementary Building Construction," "Advanced Building Construction," and "The Italian Orders of Architecture," and then followed books—*Elementary Building Construction and Drawing for Scottish Students* [Blackie, 1903]; *The Construction of a House* [Batsford, 1910, new edition revised 1922], and *The Italian Orders of Architecture* [Batsford, 1917], which fulfilled their purpose admirably.

Supervising his students' class of summer measuring at Glasgow Cathedral was the beginning of study and research into its history that yielded materials for lantern lectures, almost annually, to the Craftsmen's Society of the College (of which he was President) as well as to local bodies, architectural, archaeological, and ecclesiastical. In its Lower Church—the distinctive feature of this cathedral and the theme of much learned controversy—he believed he had located the Lady Chapel.

He travelled extensively on the Continent, twice visiting Greece and Constantinople; as an outcome articles appeared in the R.I.B.A. JOURNAL on "Salonika—the Ancient Thessalonica" (November 1906), "The Minor Byzantine Churches of Constantinople" (August 1907),

"The Parthenon" (September 1908), and "The Greek Church of St. Sophia, Constantinople" (July 1914).

The claims of his calling as teacher obsessed him to the exclusion of recreation or hobby; he was indeed the most conscientious of instructors, patient and painstaking to a fault. A wide circle of men who have passed through his course of training will hear of his death with regret and recall with respect his thoroughness and sincerity. Never too robust, in later life his health was indifferent, but it was rarely laid aside until quite recently. He died in nursing home after an operation, on 30 June, aged 61, after a period of service in the Royal Technical College short of a couple of years of the forty he looked forward to giving. His wife predeceased him by six years and he is survived by a brother and sister and an only daughter.

ALEX MCGIBBON [A.].

SAMUEL BOLTON ASHWORTH [F.].

Prior to 1904 Mr. Ashworth was in private practice and was responsible for the carrying out of a considerable amount of work in the Hanley district, Stoke-upon-Trent.

In 1904 he was retained as architect to the Fenton Education Committee, now part of Stoke-upon-Trent, and in that capacity designed and supervised the erection of two schools, Manor Street Council Infants' School and Fenton Hermitage Cross Council Infants' School, both considered to be excellent schools. In addition, he carried out a number of minor alterations to school buildings.

After the federation of the Pottery Towns in 1910, he was appointed architect to the City Education Committee and served in that capacity until his death. One of his first works of importance after his appointment was the planning and erection of the Central School of Science and Technology, in collaboration with Mr. J. Hutchings, then architect to the Staffordshire Education Committee. The building cost £13,000. Later he planned and supervised the erection of two semi-permanent schools which are still in existence, the Hamilton Road Council School and the Leek Road Council School. He was also responsible for numerous alterations and improvements in the schools of the city.

In 1915 he joined the R.F.A. and was demobilised in 1919 with the rank of lieutenant.

For some time large building operations were suspended but before his death he designed and supervised the erection of the Oakhill Council School. This provides accommodation for 350 children, but the completed plans provide accommodation for over 1,000 children together with handicraft, cookery, domestic science centres, etc.

ROBERT DIXON [L.].

The death occurred on 4 July at Barnsley of Mr. Robert Dixon, in his 75th year, after a long illness.

He was educated at Darton and Scarborough and later articled to the late Mr. Perkins, of Leeds.

In 1871 he commenced practice in Barnsley and continued with his work up to the time of his death. He had a wide and varied practice and carried out many important works in Barnsley and neighbourhood, including the Cooper Nurse Home, Cooper Art Gallery, the Barnsley Workhouse, New St. Mary's Church Schools, extensions to the Old Grammar School, besides the Burton-on-Trent Markets, Stacey Memorial Vicarage at Grenoside, Doncaster G.S. extensions, and cemeteries at Ardsley and Crigglestone, all of which were won in open competition.

Latterly he had been responsible for housing schemes at Darton, Mexborough and Shepley.



## R.I.B.A. Garden Party

The R.I.B.A. Garden Party at the Royal Botanic Gardens on 22 July proved one of the most successful social gatherings ever held by the Institute. The President, Mr. E. Guy Dawber, and Mrs. Dawber received the guests, who exceeded thirteen hundred members and guests. Amongst those present were :—

The Earl of Crawford and Balcarres, Lord and Lady Riddell, Viscount Cecil, Sir Cooper Perry, Sir John Anderson, Sir Francis and Lady Newbolt, Sir Robert and Lady Witt, Sir James and Lady Lennox, Sir Herbert and Lady Hughes-Stanton, Sir William and Lady de-White, the Rev. Sir Montague and Lady Fowler, Sir Herbert and Mrs. Joseph Duveen, Sir Theodore Cook, Sir George and Lady Hampton, Sir William and Lady Plender, Sir Frank and Lady Swaine, Sir Charles and Lady Walston, the High Commissioner for South Africa, and Mrs. Smit, Sir David Murray, Sir Philip Sassoon, Field-Marshal Sir William Robertson, Sir William and Lady Bennett, Lady Oddy, the President of the Royal College of Physicians and Lady Bradford, Lady Raleigh, Sir Edgar and Lady Anders, Sir John Simpson, Sir Gregory and Lady Foster, Sir Frank and Lady Heath, Sir Sidney and Lady Low, Lady Rogers, Sir William Davison, Sir Campbell Stuart.

Sir Daniel and Lady Hall, Sir John and Lady Burnet, Sir William and Lady Seager, Sir Brumwell Thomas, Sir James and Lady Easterton-Smith, Sir Banister and Lady Fletcher, Air Vice-Marshal Sefton Brancker, Sir Gilbert and Lady Scott, Sir Andrew Taylor, Sir Ernest Hodder Williams, Sir Howard and Lady Frank, Sir Edmund and Lady Gosse, Sir Walker Smith, the Mayor and Mayoress of Westminster, Mr. J. St. Loe Strachey, the Principal of King's College, London, Mr. and Mrs. Harley Granville-Barker, Miss Lena Howell, Mr. and Mrs. Walter Leaf, Mr. and Mrs. G. E. Buckle, Mr. and Mrs. F. W. Goodenough, Mr. and Mrs. Sutro, Mr. F. Wisohn, Mr. and Mrs. St. John Ervine, Mr. and Mrs. Oswald Iron, Mr. and Mrs. Walter, Mrs. Leonard Stokes, Mr. Alderman Iron, Mr. Ramsay MacDonald, Mr. Henry C. Gooch, Dr. Almers Mitchell, Mr. and Mrs. Richard Jack, Mr. E. R. Forber, Brigadier-General M. Mowat, Mr. and Mrs. W. Hilton Nash.

Mr. Charles Marriott, Mr. and Mrs. Cayley Robinson, Professor and Mrs. A. M. Hind, Mr. and Mrs. Reid Dick, Mr. and Mrs. Dendy Atney, Mr. and Mrs. Reynolds-Stephens, Mr. Grant Dauber, Mr. and Mrs. Lewis Hind, Professor and Mrs. Bostock Hill, Mr. and Mrs. Julius Olsson, Mr. and Mrs. Adrian Scott, Mr. and Mrs. John Essall, Mr. and Mrs. Lewis Baumer, Mr. J. A. Gotch, Mr. and Mrs. E. Eccles, Mr. and Mrs. W. Hodgson Burnet, Mr. and Mrs. Pham Forrest, Mr. T. Butler Wilson, Mr. and Mrs. J. Ernest Anck, Mr. and Mrs. H. M. Fletcher, Mr. Walter Cave, Professor H. Reilly, Mr. and Mrs. H. V. Lanchester, Professor and Mrs. Sheard, Mr. and Mrs. P. J. Waldram, Mr. and Mrs. L. H. Bucknell, Mr. and Mrs. G. C. Lawrence, Mr. and Mrs. Francis Jones, Mr. and Mrs. Bailey, Mr. and Mrs. P. W. Hubbard, Mr. M. H. Spielmann, Mr. and Mrs. Corlette, Mr. and Mrs. Arthur Keen, Mr. and Mrs. Herbert Bayes, Mr. and Mrs. Geoffrey Fildes, Dr. and Mrs. Raymond Unwin, Dr. H. and Mrs. Bashford, Mr. Ian MacAlister, Mr. and Mrs. Maurice E. Webb, Mr. and Mrs. H. V. Ashley, Mr. and Mrs. J. C. S. Soutar, Canon and Mrs. MacKean, and Mr. and Mrs. W. Curtis Green.

The guests were entertained by delightful dancing of children from the Margaret Morris School of Dancing, and a programme of music by the band of the Royal Air Force.

### ROYAL WEST OF ENGLAND ACADEMY, BRISTOL.

Mr. G. D. Gordon Hake [F.], Headmaster of the R.W.A. School of Architecture, Royal West of England Academy, Bristol, has been elected a Royal West of England Academician.

### LONDON BRIDGES.

#### MEMBERS OF THE ROYAL COMMISSION.

The Prime Minister in the House of Commons on 14 July announced that the constitution of the Royal Commission on Bridges over the Thames in the London area had been completed, and that the following had been appointed members :—

Lord Lee of Fareham (chairman).

Sir Willoughby Dickinson.

Lord Hambleden.

Professor Charles Inglis.

Sir William Plender, and

Sir Lawrence Weaver.

The terms of reference are as follow :—

To survey the whole problem of cross-river traffic in London; to report what provision should be made to meet future requirements, and, in particular, to consider the proposals made in connection with Waterloo and St. Paul's Bridges. Having regard to the urgency of the question, the report should be completed at the earliest possible date.

### ASHMOLEAN MUSEUM, OXFORD.

#### PROPOSED WINDOW TO WREN.

Most of our readers are aware that a very interesting exhibition of early astronomical and mathematical instruments was opened last year in the old building of the Ashmolean Museum, on the west side of the Sheldonian Theatre. The exhibition is in the charge of Dr. R. T. Gunther, and is on the first floor. On the staircase there are two small windows, one filled with unsightly glass, the other already converted into a memorial to Ashmole, who erected the building and is responsible for much of the collection. Dr. Gunther wishes to convert the other window in the same way, so as to form a local memorial to Wren, who designed the Sheldonian as well as the Ashmolean, and was himself an eager and talented astronomer and mathematician. It is with this object that a subscription list has been started, and it is hoped that the members of the Institute, which has already repaired an Ashmolean wall, will lend a helping hand by contributing to the memorial. As stated last month, the cost is estimated not to exceed £65.

### ROYAL SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.

#### COMPETITION OF INDUSTRIAL DESIGNS, 1926.

A selection of the designs received in the above competition for prizes offered by the Society are being exhibited in the Upper East Gallery of the Imperial Institute, South Kensington, to 31 August, every weekday from 10 a.m. to 5 p.m.

The exhibition is open free of charge. It includes designs in architectural metalwork (shop fronts, lift enclosures, and window frames), wallpapers, textiles, furniture, printing and book production, china, earthenware and glass, as well as designs for posters, showcards, exhibition stands, etc., submitted for valuable prizes offered by a number of well-known firms.

## NOTES FROM THE MINUTES OF THE COUNCIL.

5 July 1926.

## THE BOARD OF ARCHITECTURAL EDUCATION.

On the recommendation of the Board the following decisions were made by the Council :

(A) The Incorporated Association of Headmasters will be invited to nominate a representative to serve on the Board of Architectural Education.

(B) A Paper on the "Outline of the History and Practice of Town Planning" will be included in the R.I.B.A. Final Examination as an alternative to the Paper on Advanced Steel Construction (B.2) or Hygiene (C).

The following syllabus has been approved in connection with the Paper :

*The Outline of the History and Practice of Town Planning.*

(i.) History of Town Planning as illustrated by Ancient, Mediæval, Renaissance, and Modern town plans.

(ii.) The influences dictating the growth and development of cities.

(iii.) Economic, Hygienic and Social considerations and the varying character of towns due to the domination of one or more of these considerations.

(iv.) Requirements for Administration, Commerce, Industries and Housing.

(v.) Traffic and Transport by road, rail, water and air, and provisions for dealing with them.

(vi.) Parks, Recreation Grounds, Playing Fields, Gardens and other open spaces and their disposition.

(vii.) Architectural elements, grouping of buildings, Bridges, Monuments, Statuary and other decorative features ; their scale and proportions.

(viii.) The preservation of Historic Buildings and Sites.

(ix.) The influence of engineering requirements, such as roads, sewers, and other Municipal services upon Town Planning schemes.

(x.) The conduct of procedure under the Town Planning Acts and other Acts and regulations affecting the development and improvement of towns.

(C) The "Outline of the History and Practice of Town Planning" will be included as an alternative subject in the R.I.B.A. Final Examinations from July 1927 onwards.

*(D) The R.I.B.A. Examination Qualifying for Candidature as Associate R.I.B.A.*

The following revised scheme and time-table for the R.I.B.A. Special Examination qualifying for candidature as Associate was approved :

*R.I.B.A. Special Examination Qualifying for Candidature as Associate R.I.B.A.*

The Special Examination will be open to architects in practice over 30 years of age and to assistants over 30 years of age whose applications are approved by the Board. In support of their applications for admission to the Examination, candidates must submit as evidence of their general architectural knowledge and capabilities—

(a) examples of their work accompanied by a detailed report or reports, and

(b) a written report, thesis, review or article on some architectural, town planning or similar matter as

an indication of their ability to study or analyse subject and to write clearly upon it.

*Time-Table of the Special Examination.*

Hours.	Wednesday.
10.0-5.30 (A).	Design for a Building of Moderate dimensions or a portion of a more important edifice, to be made from particulars given. The drawings to comprise plans, elevation and section, to a small scale, with some details to a large scale.
	Before leaving the building on the first day, the candidate must hand in a tracing of his design, indicating its main lines which must not be materially departed from in the subsequent development of his scheme.
	Thursday.
10.0-5.30	Design.
	Friday.
10.0-5.30	Design.
	Saturday.
	Monday.
10.0-1.30 (B.1)	General Construction, including shoring and underpinning and a general knowledge of steel and concrete.
2.30-5.30 (C)	Hygiene or (F) Town Planning.
	Tuesday.
9.30-12.0 (D)	Specifications and the Properties and Uses of Building Materials.
12.0-1.30 (E)	Professional Practice.
2.30	Oral Examination.

The Board further recommend that the Examiners for the Paper on General Construction, including shoring and underpinning and a general knowledge of steel and concrete (B.1), be requested to set two or three questions on the general knowledge of steel and concrete construction to be starred and to be attempted only by Special Examination candidates.

*(E) The R.I.B.A. Intermediate Examination and the Bombay Government Diploma Examination.*

A suggestion made by the Bombay Architectural Association that, instead of setting up the organisation for holding the R.I.B.A. Intermediate Examination in Bombay, the R.I.B.A. should accept the Government Diploma Examination as its equivalent, provided that such candidates as have not been through the School of Architecture, Bombay, should have passed the University Matriculation and the Advanced Examination in Architecture (which is the one previous to the Diploma Examination) in addition to the Diploma Examination.

The Board, after careful inquiry and consideration, recommend that the suggestion made by the Bombay Architectural Association be approved, provided that at least one member of the R.I.B.A. approved by the Board of Architectural Education shall serve on the Examining Body for the Government Diploma Examination.

*(F) The Arthur Cates Prize.*

A revised scheme for the Arthur Cates Prize was approved and ordered to be submitted to the Charity Commissioners.



## HONORARY MEMBERSHIP.

The Council decided to nominate Lord Lee of Fareham for the Hon. Fellowship and Sir William Davison, M.P., for the Hon. Associateship.

## GENERAL COUNCIL FOR THE NATIONAL REGISTRATION OF PLUMBERS.

Mr. F. E. Pearce Edwards [F.] was nominated to represent the R.I.B.A. at the Annual General Meeting of the General Council for the National Registration of Plumbers at Sheffield.

## ANCIENT MONUMENTS ADVISORY COMMITTEE (GOVERNMENT OF NORTHERN IRELAND).

Sir A. Brumwell Thomas [F.] was nominated to represent the R.I.B.A. on the Ancient Monuments Committee (Government of Northern Ireland).

## INSTITUTION OF PUBLIC LIGHTING ENGINEERS.

Lieut.-Colonel G. Reavell [F.] was nominated to represent the R.I.B.A. at the Third Annual Meeting and Conference of the Institution of Public Lighting Engineers at Newcastle-upon-Tyne.

## STUDENTSHIP.

The following Probationers were elected Students of the R.I.B.A.:

Fredrick Bertram Armstrong, 37 Adelaide Crescent, Hove, Sussex, Architectural Association.

Stephen Noel Bertram, Winsley House, Stourwood, Bournemouth, Architectural Association.

Frank Bowan Reynolds Brown, 35 Bedford Square, W.C., Architectural Association.

John Rosser Crickmay, 16 Park Road, Redhill, Surrey, Architectural Association.

Colstan Vyvyan Trubshawe, Little Thaxted, Hay Lane, N.W.9, Architectural Association.

Mary Lillian Joy Wall, 78 Westmoreland Road, Bromley, Kent, Architectural Association.

## RETIRED FELLOWSHIP.

Mr. Edward Hewetson [F.] was transferred to the class Retired Fellows.

## NOTES FROM THE MINUTES OF THE COUNCIL.

19 July 1926.

## EXHIBITIONS OF ARCHITECTURE.

Arrangements have been made for an Exhibition of Dominion and Colonial Architecture in October–November 1926, and an Exhibition of Indian and Burmese Architecture in 1927. Annual Exhibitions of current Architecture will be held in the R.I.B.A. Galleries beginning with the summer of 1927.

## ARCHITECTS AND OPERATIVES.

The Council approved the establishment of a Joint Consultation Board, composed of representatives of the R.I.B.A. and the National Federation of Building Trade Operatives, for the purpose of considering such questions as education, apprenticeship systems, means of stimulating the revival of craftsmanship and awakening interest of workmen in the design of buildings upon which they are engaged, "wet time," and cognate matters apart from the question of wage rates) discussion of which, between architects and operatives, would tend to promote a better understanding of the problems of the Building Industry, and of the difficulties which confront both parties.

## BRITISH SCHOOL AT ROME.

A Henry Jarvis Travelling Studentship of £250 for one year, tenable at the British School at Rome, was awarded to Mr. B. R. Ward.

## REGISTRATION.

The Council adopted the Registration Bill as drafted by the Registration Committee, ordered it to be submitted to the Councils of the Allied Societies and to the general body of members for their approval, and authorised the Registration Committee to consult with other interested professional bodies with a view to securing their co-operation and support previously to presenting the Bill to Parliament.

## MEMBERS' NAMES ON NOTICE BOARDS.

The Council approved the recommendations of the Practice Standing Committee on this subject and ordered them to be embodied in the "Suggestions Governing the Professional Conduct and Practice of Architects."

## THE "STANDARD METHOD OF MEASUREMENT."

On the advice of the Architects' and Builders' Joint Consultation Board, it was decided to publish in the R.I.B.A. Journal a note recommending members generally to adopt the "Standard Method of Measurement."

## THE BRITISH ENGINEERING STANDARDS ASSOCIATION.

Mr. E. H. Evans [F.] has been appointed to represent the R.I.B.A. on the Special Committee on Cranes and Derricks for use on Buildings.

Mr. P. J. Waldram [L.] has been appointed to represent the R.I.B.A. on the Sub-Committee on Standardization of Colours.

## THE BRITISH WATERWORKS ASSOCIATION.

Mr. H. D. Searles-Wood [F.] and Lt.-Col. P. A. Hopkins [L.] have been appointed to represent the R.I.B.A. on the Standing Committee on Water Regulations.

## MEMBERSHIP.

The following were elected to the Fellowship by the Council:

Mr. F. L. H. Fleming (Johannesburg).

Mr. G. H. Godsell (Sydney).

General Sir J. Talbot Hobbs (Perth, W.A.).

Mr. J. S. Murdoch (Melbourne).

Mr. G. L. Wilson (Shanghai).

Mr. John A. Pearson (Toronto).

## RESIGNATION.

The following resignation was accepted:

P. Morley Horder [F.].

## REINSTATEMENT.

Mr. F. H. Bromhead was reinstated as an Associate.

## STUDENTSHIP.

The following Probationers were elected Students of the R.I.B.A.:

Edward Hayley Beale, Rockhurst, Burwash, Sussex, Architectural Association.

David Herman Beaty-Pownall, 61 Oakley Street, Chelsea, Architectural Association.

Francis John Buckland, 34 Bedford Square, W.C.1, Architectural Association.

Ronald McConnell Butler, Redclyffe, Halesowen, near Birmingham, Birmingham School of Architecture.

Henry Myles Reilly Drury, 28 Downshire Hill, Hampstead, N.W.3, Architectural Association.

Raymond Charles Erith, 46 Albion Road, Sutton, Surrey, Architectural Association.

Barbara Sybil Holt Fisher, 16 Grove End Road, N.W.8, Architectural Association.

Walter Robert Fitzgibbon Fisher, 16 Grove End Road, N.W.8, Architectural Association.

Ella Mary Garratt, 71 Holyhead Road, Handsworth, Birmingham, Birmingham School of Architecture.

John Grey, The White House, Cobham, Surrey, Architectural Association.

Mary Freda Rigg, The Lawn, Waterlooville, Hants, Architectural Association.

Maung Tha Tun, 138 Fellows Road, Swiss Cottage, Architectural Association.

Alec Vetchinsky, 45 Gloucester Road, Regent's Park, N.W.1, Architectural Association.

Geoffrey Egerton Warburton, 1 St. James's Street, S.W.1, Architectural Association.

#### LICENTIATESHIP.

The following were elected as Licentiates under Section III (f) of the Supplemental Charter of 1925:—Mr. W. Arnold Mitchell, Mr. G. Austen Taylor.

## Notices

### CONDITIONS OF APPOINTMENT OF ARCHITECTS.

The Practice Standing Committee desire to remind members of the importance of seeing that the conditions of their appointments are in order. In many cases in which the Committee's advice has been asked, it has been found that the position of the architect has been prejudiced owing to the questionable legality of the original appointment.

Members appointed as architects by public authorities, or other corporate bodies, should insist on the appointments being made under seal.

#### THE PRACTICE STANDING COMMITTEE.

Among the many duties of the Practice Standing Committee is that of assisting with advice those Members who are doubtful as to the professional fees which may properly be charged in unusual or difficult circumstances. While the Committee cannot undertake to prepare accounts, they are always prepared to advise Members—particularly the younger Members—of the profession who desire assistance in connection with their professional fees or are in doubt as to the proper interpretation of the R.I.B.A. Scale of Charges.

#### ELECTION OF MEMBERS.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that, if they wish to take advantage of the election to take place on 29 November 1926, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than 2 October 1926.

#### LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and

desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A. stating the clause under which they propose to apply for nomination.

#### ROOMS FOR ARBITRATIONS, ETC.

Convenient rooms for arbitrations, etc., are now available for hire at No. 28 Bedford Square, W.C.1, at a fee of £2 2s. per day. All enquiries with regard to vacancies, etc., should be addressed to Mr. C. McArthur Butler at that address.

#### THE STANDARD METHOD OF MEASUREMENT

In April 1923 the Council of the R.I.B.A., on the advice of the Practice Standing Committee, recommended members of the R.I.B.A. in England and Wales to adopt the "Standard Method of Measurement" agreed by the Surveyors' Institution, the National Federation of Building Trades Employers and the Institute of Builders and informed them that copies of the document could be obtained from the Surveyors' Institution and the National Federation.

In June 1925 the Council recommended to members the application of the Standard Method of Measurement to important building work in the East.

On the advice of the Architects' and Builders' Joint Consultation Board the Council of the R.I.B.A. now recommend members generally to adopt the "Standard Method of Measurement," the value of which has been increasingly demonstrated in the last few years.

#### PUBLIC WORKS, ROADS AND TRANSPORT CONGRESS AND EXHIBITION.

NOVEMBER 1927.

##### PAPERS.

##### *Competition for the Award of Prizes.*

The Congress Organising Committee have decided to offer the following prizes for Papers which are submitted for discussion at the Congress to be held in November, 1927:—

1st Prize—Gold Medal and £50.

2nd Prize—Silver Medal and £25.

3rd Prize—Bronze Medal and £10.

The competition is open without restriction of nationality.

The subject of each Paper must be one which falls within the services covered by the Congress, that is to say: Highways and Bridges, Water Supply, Sewerage and Sewage Disposal, Cleansing, Gas, Electricity, Housing and Town Planning, Tramways and Light Railways, Agriculture (Small Holdings, Land Drainage, Land Reclamation and Agricultural Education), and Local Government Organisation.

Papers must be submitted not later than 17 January, 1927.

Application for the rules of the competition must be made to the Hon. Secretary, Public Works, Roads and Transport Congress, 84, Eccleston Square, London, S.W.1, from whom more detailed information as regards the subjects for Paper may also be obtained.

Papers may be submitted for discussion at the Congress without being entered for competition. Such papers should be clearly marked "Not for competition."

#### R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28 Bedford Square, London W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the Committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.



BOARD OF ARCHITECTURAL EDUCATION.  
THE VICTORY SCHOLARSHIP AND THE TITE PRIZE—  
FINAL COMPETITIONS.

As the result of the Preliminary Competitions for the Victory Scholarship and the Tite Prize, the following have been selected to take part in the Final Competitions :

*Victory Scholarship.*

- Mr. M. G. C. Spencely, School of Architecture, Liverpool University.  
Mr. D. H. Beaty-Pownall, School of Architecture, Architectural Association.  
Mr. L. R. Hiscock, School of Architecture, Architectural Association.  
Mr. R. T. Cummings, School of Architecture, Architectural Association.  
Mr. J. B. Wride, The Technical College, Cardiff.  
Mr. J. A. Coia, Glasgow School of Architecture.

*Tite Prize.*

- Mr. T. C. Haynes, School of Architecture, Liverpool University.  
Mr. H. H. Powell, School of Architecture, Liverpool University.  
Mr. K. J. R. Peacock, School of Architecture, Architectural Association.  
Mr. E. B. O'Rorke, School of Architecture, Architectural Association.  
Mr. E. B. Cumine, School of Architecture, Architectural Association.  
Miss C. W. Preston, School of Architecture, Architectural Association.  
Mr. H. H. Goldsmith, School of Architecture, Architectural Association.  
Mr. A. B. Grayson, School of Architecture, Architectural Association.  
Miss B. Scott, School of Architecture, Architectural Association.  
Mr. George Ford, School of Architecture, Northern Polytechnic.  
Mr. Donald G. Walton, School of Architecture, Birmingham.  
Mr. P. G. Budgen, The Technical College, Cardiff.  
Mr. H. A. Barton, The Technical College, Cardiff.  
Mr. Edward Holman.  
Mr. D. H. McMorran.  
28 July 1926.

CONFERENCE WITH TEACHERS OF BUILDING.

On Wednesday, 21 July 1926, the Schools Committee of the Board of Architectural Education of the R.I.B.A. held a Conference with the representative teachers of Building, who have been undergoing a course in London arranged by H.M. Board of Education.

The Conference took place in the R.I.B.A. Galleries, and was largely attended.

The Chairman of the Board of Architectural Education, Mr. Maurice E. Webb D.S.O., M.C., [F.], presided, and a Paper was read by Professor A. E. Richardson [F.] on

"The Elements of Design and the Teaching of Building Construction." A vote of thanks to the reader of the Paper was moved by Mr. Howard Robertson [F.] and seconded by Mr. Martin S. Briggs [F.], H.M.I.

In the subsequent discussion, the following spoke :

Mr. H. D. Searles-Wood [F.]; Mr. T. P. Bennett [F.]; Mr. F. Gould Wills [F.]; Mr. Lionel Freeborn; Mr. J. L. Manson, H.M.I.; Mr. W. A. Harvey [F.].

At the conclusion of the Conference, Mr. Hugh Davies, H.M.I., seconded by Mr. J. C. Smail, Assistant Education Officer for Technical Education, London County Council, moved a vote of thanks to the Chairman.

The teachers subsequently inspected examples of architects' working drawings which had kindly been lent by the following :

Mr. E. Guy Dawber, F.S.A. [F.]; Mr. G. Topham Forrest, F.R.S.E. [F.]; Mr. W. A. Harvey [F.]; Mr. P. D. Hepworth [F.]; Mr. R. T. Longden [F.]; Messrs. Richardson and Gill [FF.].

R.I.B.A. MAINTENANCE SCHOLARSHIPS IN  
ARCHITECTURE.

The Maintenance Scholarships Committee of the R.I.B.A. announce that the York and East Yorkshire Architectural Society have promised a contribution to the Maintenance Scholarships Fund of £35 per annum.

R.I.B.A. FINAL EXAMINATION.

Attention is called to the fact that the subject of "The Outline of the History and Practice of Town Planning" will be included as an alternative to the subject of Advanced Steel Construction (B.2) or Hygiene (C) in the R.I.B.A. Final Examination from January 1, 1927, onwards.

The following has been approved as the syllabus for the subject.

1. History of Town Planning as illustrated by Ancient, Mediæval, Renaissance and Modern Town Plans.
2. The influences dictating the Growth and Development of cities.
3. Economic, Hygienic and Social Considerations and the varying character of towns due to the domination of one or more of these considerations.
4. Requirements for Administration, Commerce, Industries and Housing.
5. Traffic and Transport by Road, Rail, Water and Air, and provisions for dealing with them.
6. Parks, Recreation Grounds, Playing Fields, Gardens, and other open spaces and their disposition.
7. Architectural elements, grouping of Buildings, Bridges, Monuments, Statuary and other decorative features; their scale and proportions.
8. The preservation of Historic Buildings and Sites.
9. The influence of engineering requirements, such as Roads, Sewers and other Municipal Services, upon Town Planning schemes.
10. The conduct of procedure under the Town Planning Acts and other Acts and regulations affecting the development and improvement of towns.

## R.I.B.A. TESTIMONIES OF STUDY.

Arrangements have been made between the Board of Architectural Education of the R.I.B.A. and the Editor of *The Builder* whereby approved Testimonies of Study submitted by candidates for admission to the R.I.B.A. Examinations will be published from time to time in *The Builder* for the guidance of students as regards the standard required by the Board.

After the publication of each set of Testimonies of Study in *The Builder* copies of the reproductions will be available, by courtesy of *The Builder*, free of charge to students on application to the R.I.B.A.

## EXAMINATIONS RECOGNISED FOR PROBATIONERSHIP R.I.B.A.

Attention is called to the fact that the Council R.I.B.A., on the recommendation of the Board of Architectural Education, have decided not to accept the Day School (Higher) Examination of the Scottish Education Department in support of an application for registration as Probationer.

Special attention is called to the fact that, except in very special cases, a Headmaster's Certificate will not be accepted as a qualification for registration as Probationer R.I.B.A. after 1 October 1927, and no one will be registered as a Probationer unless that person has passed one of the recognised public examinations in the required subjects.

A list of the examinations recognised may be obtained free at the R.I.B.A.

## CARDIFF TECHNICAL COLLEGE.

## EXHIBITION OF DESIGNS AND WORKING DRAWINGS.

Very considerable interest was aroused in the South Wales area by an exhibition of architectural work held at the Technical College, Cardiff, last month.

The exhibition was arranged by the South Wales Institute of Architects (Central Branch), jointly with the Department of Architecture and Civic Design, at the Cardiff Technical College.

The exhibition included the following :—

Final designs for the Masonic Peace Memorial submitted by the local architects who were selected to take part in the final competition—Percy Thomas, Esq. [F.] (Messrs. Ivor Jones and Percy Thomas) and Messrs. Willmott and Smith.

A collection of working drawings, which, as the result of efforts made by Mr. W. S. Purchon, M.A., A.R.I.B.A., Head of the Department of Architecture and Civic Design, have been presented to the Department, were also on view. These drawings were presented by the following American and British architects :—Messrs. Cram and Ferguson, of Boston, U.S.A.; Messrs. Helmle and Corbett, of New York, U.S.A.; E. Guy Dawber, Esq., President, Royal Institute of British Architects; Sir John Burnet and Partners; Sir G. G. Scott, R.A.; Messrs. Ernest Newton, R.A., and Sons; Professor A. E. Richardson [F.]; L. Sylvester Sullivan, Esq. [F.]; M. Louis de Soissons, F.R.I.B.A., S.A.D.G.; Mr. Cyril Farey, A.R.I.B.A.; Messrs. Thomas and Jones, Swansea; Messrs. Ivor Jones and Percy Thomas, Cardiff; Mr. T. Alwyn Lloyd [F.], Cardiff.

Gift specimens of students' work from the school of Architecture of the Columbia University, New York, were on exhibition, together with examples of a loan collection of students' work from the School of Architecture of the University of Liverpool.

The drawings submitted in the Preliminary Rome Competition by Mr. J. B. Wride, Rome Finalist, 1926, who is a student in the Cardiff School of Architecture, were also on view.

## UNIVERSITY COLLEGE.

The following awards have been made in the Bartlett School of Architecture at University College :—

Bartlett Entrance Exhibitions : H. H. Ford, Eastbourne Municipal Secondary School; E. F. Starling, Whitgift Middle School, Croydon.

Donaldson Silver Medal : H. T. Dyer.

Prize for Design in Ferro-Concrete (£25) : Jessie M. Greig.

Ronald Jones Prizes : W. F. B. Lovett (Mediaeval Architecture); W. G. D. Anderson (Renaissance Architecture).

"Architects' Journal" Prize for Design : J. B. Cochrane.

Herbert Batsford Prize : Edna M. L. Mills.

Certificates in Architecture : C. P. F. Fleetwood-Hesketh, P. A. Wailes.

Sub-Department of Town Planning : Certificates—A. J. Hill, H. A. Johnson, T. Ritchie.

## The Examinations

## INTERMEDIATE.

June 1926.

The Intermediate Examination, qualifying for candidature as Student R.I.B.A., was held in London from 11 to 17 June 1926, and in Manchester from 11 to 16 June 1926. Of the 94 candidates examined, 56 passed and 38 were relegated. The successful candidates were as follows, the names being given in order of merit as placed by the examiners :—

SUNTER : JOHN ERNEST [P. 1923], 16 Vicarage Road, Hoole, Chester.

CLAYDON : BERNARD [P. 1922], 641 St. Helen's Road, Bolton, Lancs.

HAWTIN : MARJORIE EDITH [P. 1923], 1 Arngask Road, Catford, S.E.6.

CULPIN : CLIFFORD EWART [P. 1925], 3 Portsmouth Street, Lincoln's Inn, W.C.2.

PARKER : CECIL JAMES [P. 1925], 105 Noel Street, Nottingham.

STEEVENS : ARTHUR EWART [P. 1924], Bronhaul, Amersham Hill, High Wycombe.

CARR : TERENCE [P. 1925], 19 Church Street, South Lambeth, S.W.8.

JACKSON : CECIL CHARLES [P. 1920], 2 Ranelagh Road, Winchester.

MANT : CECIL GEORGE [P. 1924], 8 Lansdowne Road, Muswell Hill, N.10.

GODDARD : ALEC NORRIS [P. 1922], 123 Dalzell Road, Stockwell, S.W.9.

TOWNSEND : HORACE ALFRED [P. 1924], University College Hall, Ealing, W.9.

DURELL : HARRY [P. 1925], 10 Hammersmith Terrace, W.6.

WORTHINGTON : PHILIP VALLENDER [P. 1924], "Newholm," Cranford Avenue, Knutsford, Cheshire.

SHARPE : ALBERT LAWRENCE [P. 1921], "Elm View," 52 Fosse Road South, Leicester.

ELEY : THOMAS HENRY [P. 1920], 17 Cambridge Gardens, N. Kensington, W.10.

HEWITT : ALFRED [P. 1924], 138 Loughborough Park, Brixton, S.W.9.

MELLOR : FRANK [P. 1926], Bankfield Road, Armitage Bridge, Huddersfield.

MARSHALL : HEDLEY BERNARD [P. 1924], 160 Harlaxton Drive, Nottingham.



MITH : JOHN JAMES [P. 1925], 66 Lord Street, Hindley, Lancashire.  
 BROWN : STANLEY TREVOR [P. 1925], 1 Viola Street, Bootle, Liverpool.  
 BOUNG : RALPH ARNOLD [P. 1926], "Glen Maye," Gedling, Notts.  
 BURTAIN : SIDNEY PHILIP [P. 1922], 3 Hadley Gardens, Chiswick, W.4.  
 BOWLES : ALEC JOHN [P. 1925], "Daisy Croft," Rayleigh Road, Thundersley, Essex.  
 HILLIPS : RONALD ALFRED [P. 1922], "Glenside," 7 Stanfield Road, Winton, Bournemouth.  
 WILLIAMS : SIRIOL [P. 1923], "Gogerddan," 31 Queen Victoria Road, Llanelly, S. Wales.  
 ANNING : ROGER DAVYS [P. 1926], 41 St. George's Square, S.W.1.  
 REELE : FRANK REGINALD [P. 1924], "Newlands," Stockton Brook, Stoke-on-Trent, Staffs.  
 GOLDSBY : JOSEPH [P. 1924], "Newby," Bachelors Lane, Dee Banks, Chester.  
 BETHWELL : ROLF HOLROYD [P. 1925], Albion Place, 206 Walmersley Road, Bury, Lancashire.  
 ENDRICK : ALBERT WILLIAM ROYAL [P. 1922], 79 Wendell Road, Shepherd's Bush, W.12.  
 CRICKER : KENNETH [P. 1926], "Briarfield," Clifton Road, Heaton Moor, Stockport.  
 GAMB : WILLIAM [P. 1923], 57 Marchmont Road, Edinburgh.  
 GINGLAND : ARCHIBALD TATHAM [P. 1926], "Hayslope," Tennyson Road, Yeerongpilly, Brisbane, Queensland, Australia.  
 MACDONALD : ERIC ALEXANDER HECTOR [P. 1925], 16 Trebovir Road, S.W.5.  
 MACKENZIE : ALLAN [P. 1926], c/o 173a Union Street, Aberdeen.  
 MARSH : JOSEPH STANLEY [P. 1920], 94 Church Road, Urmston, near Manchester.  
 HEATLEY : FREDERICK GORDON [P. 1925], 10 Old Burlington Street, W.1.  
 LETT : HERBERT KELLETT [P. 1920], 73 Promenade, Flat 2, Southport.  
 OWELL : GEORGE BERNARD HOPSON [P. 1923], "Brinkley," Dereham, Norfolk.  
 BENCHLEY : ARTHUR REGINALD [P. 1924], "The Villa," Mill Road, Gillingham, Kent.  
 APMAN : ERIC WEBB [P. 1921], 56 Southgrove Road, Sheffield.  
 WLEY : RODERICK HEDLEY [P. 1922], 20 Erlanger Road, New Cross, S.E.14.  
 MCANAN : DAVID RONALD [P. 1924], 79 Cleveleys Road, Clapton, E.5.  
 CRIBBY : EDWARD ASHTON [P. 1922], 80 Westbourne Avenue, Hull.  
 LEY : HUGH VALENTINE [P. 1922], 72 Oakley Street, Chelsea, S.W.3.  
 BRISON : RONALD HERBERT [P. 1923], 64 Church Street, Woolwich, S.E.18.  
 RYSON : ERNEST WILLIAM [P. 1920], 23 Forbury Road, Southsea.  
 BORDEN : STANLEY ALLEN [P. 1923], 72 Sugden Road, Lavender Hill, S.W.11.  
 BRES : JOHN HAROLD [P. 1922], 51 Wathen Road, Leamington Spa.  
 BISHAW : SIDNEY [P. 1922], 168 Turton Road, Bradshaw, near Bolton, Lancs.  
 BRUCE : FRANK NATHANIEL [P. 1920], 30 Fore Street, Budleigh Salterton, Devon.  
 BIAN : NOEL [P. 1924], Holly Lodge, St. James' Park, Harrogate.  
 BOLD : JOHN JOSEPH [P. 1922], 69, Calva Road, Dublin.

SHELLEY : EDWIN HERBERT [P. 1923], 172 Branstone Road, Burton-on-Trent.  
 TAMKIN : ARTHUR LESLIE [P. 1923], "Paraiso," St. Efrides Road, Torquay.  
 WOLFF : WILLIAM EUGEN [P. 1921], 17 Park Place, Milton Road, Gravesend, Kent.

## FINAL AND SPECIAL.

The Final and Special Examinations, qualifying for candidature as Associate R.I.B.A., were held in London from 7 to 15 July 1926. Of the 77 candidates examined (6 Part I only, 3 Part II only) 51 passed (4 Part I only, 2 Part II only) and the remaining 26 were relegated. The successful candidates are as follows :—

APPS : LESLIE MASON [*Special*], The Nest, Sutton Valence, near Maidstone, Kent.  
 ARTHUR : JOHN ABERCROMBY [S. 1924], Allerton, Rosebank Road, Edinburgh.  
 BOURNE : JOHN HENRY [S. 1924], 24 Cotham Road, Cotham, Bristol.  
 CACHEMAILLE-DAY : NUGENT FRANCIS [S. 1919] [Part II only], 61 Grove End House, St. John's Wood Road, N.W.8.  
 CARTER : PETER GEORGE JEFFERY [S. 1924], The Red Cottage, Peppard Road, Caversham.  
 EDWARDS : KENDRICK [*Special*], 16 Donegall Square South, Belfast.  
 ENGLEFIELD : IAN ULMER [S. 1918] [Part I only], 31 Ruislip Road, Northwood, Middlesex.  
 FELGATE : ERIC GEORGE [S. 1922], 11 Victory Road, Ilkley.  
 FITTON : RODERICK ARTHUR [*Special*] [Part I only], "Bedweni," Glyn-y-mach Road, Llandudno Junction, Carnarvonshire.  
 FOUBISTER : PETER JOHN MALCOLM JOHNSTONE [*Special*], 11 Wilfrid Terrace, Piers Hill, Edinburgh.  
 GREEN : FRANK STANLEY MORDEN [S. 1923], 272 Willesden Lane, Cricklewood, N.W.2.  
 HORNER : HUGH BALDWIN LYLE [S. 1925], 31 Constantine Road, N.W.3.  
 JOHNSON : VICTOR LLOYD [*Special*] [Part I only], 3 Greenham Road, Muswell Hill, N.10.  
 MACMANUS : FREDERICK EDWARD BRADSHAW [S. 1926], 39 Rotherwick Road, N.W.11.  
 NASH : EDWARD TINDAL ELWIN [S. 1924] [Part II only], The Cedars, Cranford, near Hounslow, Middlesex.  
 NASH : VIVIAN LESLIE [S. 1926], 7 Duncan Terrace, N.1.  
 OLDACRE : WILLIAM BERNARD [S. 1923], 130 Princes Road, Hartshill, Stoke-on-Trent, Staffs.  
 PRICE : ARTHUR JOHN [S. 1924], The Hollies, Hilderstone, Stone, N. Staffordshire.  
 PRINGLE : GORDON [*Special*], 1a Kensington Place, W.8.  
 REMNANT : EUSTACE ARCHIBALD [*Special*] [Part I only], 82 Cecil Avenue, Wembley.  
 ROBERTS : DOUGLAS HUGH POYNTER [S. 1923], 21 Grosvenor, Bath.  
 SAUNDERS : DYCE CHALMERS [S. 1925], 72 Walmer Road, Toronto, Ontario, Canada.  
 SMITH : HARRY HIRST [S. 1923], "Merridale," Hereford Road, Southport, Lancs.  
 SUTCLIFFE : BRIAN LISTER [S. 1926], 44 Temple Fortune Hill, N.W.11.  
 TYLER : ERIC BRIAN [S. 1923], "Kilbirnie," Llanishen, Glamorgan.  
 THRASHER : WILLIAM JAMES [S. 1924], Steine House, Brighton.  
 WALLNUTT : CHARLES NIGEL [*Special*], E. Mahoney and Son, Bank of N.Z. Buildings, Swanson Street, Auckland, N.Z.  
 WHITE : LEONARD WILLIAM THORNTON [S. 1922], 80 Mayfield Street, Hull.

WILSON : EDWARD DOUGLAS [S. 1926], 31, Cambridge Street, W.2.  
 BARRETT : WALTER [Special], 111 Manchester Road, Bury, Lancs.  
 BARRINGTON-BAKER : JAMES [S. 1923], Grove Lodge, Finchley, N.3.  
 BENT : FRANK [S. 1924], Min-y-don, Glan Conway, Denbighshire.  
 CARTER : RICHARD JEFFERY [S. 1922], The Red Cottage, Peppard Road, near Caversham, Oxon.  
 CHESTER : HAROLD WILLIAM [S. 1921], 94, Langham Road, Teddington, Middlesex.  
 COSH : JAMES AUBREY [S. 1925], 209 Hamlet Gardens, Ravenscourt Park, W.6.  
 GOLDSMITH : EDWARD FELIX [S. 1925], 11b Bishopswood Road, Hampstead Lane, N.6.  
 LLOYD : WILLIAM ANTONY SAMPSON [S. 1924], 39 Horseferry Road, S.W.1.  
 MACDONALD : ALISTER GLADSTONE [S. 1921], 9 Howitt Road, Hampstead, N.W.3.  
 PARKER : ROBERT [Special], "Roslyn," Old Road, Llandudno.  
 PUNCHARD : STANLEY CHARLES [S. 1923], 7 Second Avenue, Heaton, Newcastle-on-Tyne.  
 RICHARD : JOHN CYRIL [S. 1922], 18 Clifton Road, Winchester.  
 ROBERTS : ALFRED GEORGES [Special], 27 Lawn Crescent, Kew Gardens, Surrey.  
 ROBERTS : THOMAS IDWAL [Special], 336 St. Albans Road, Watford, Herts.  
 SALT : GEOFFREY WYNDHAM [S. 1923], The Royd, Selborne Road, Handsworth Wood, Birmingham.  
 SCOTT : CECIL JAMES [Special], 79 High Street, Southend-on-Sea.  
 SEELY : HENRY JOHN ALEXANDER [Special], 3 Queen Square Place, Queen Anne's Gate, Westminster.  
 SIDNELL : WILLIAM EWART [S. 1919], 12 Desenfarn Road, Dulwich, S.E.21.  
 SLOOT : LAMBERT LOUIS THEODORE [Special], 3 Ormond Avenue, Hampton, Middlesex.  
 THEOBALD : ROBERT COURTENAY [S. 1925], The Penn Club, 9 Tavistock Square, W.C.1.  
 TRENT : WILLIAM SYDNEY [S. 1926], 6 Broad Street Place, E.C.2.  
 WRIGHT : HUBERT [Special], 122 Clarence Gate Gardens, N.W.1.

#### EXAMINATION IN PROFESSIONAL PRACTICE FOR STUDENTS OF SCHOOLS OF ARCHITECTURE RECOGNISED FOR EXEMPTION FROM THE R.I.B.A. FINAL EXAMINATION.

This Examination was held in London on 13 July 1926. Of the 37 candidates examined, 33 passed. The successful candidates are as follows :—

BOOTH : ROLFE GILBERT, Lakeswood, Town Court, Orpington, Kent.  
 BROWN : FRANK BOWEN REYNOLDS, 35 Bedford Square, W.C.1.  
 PETERS : HENRY ALBAN, 8 Union Road, Pennsylvania, Exeter.  
 \*HALIM : MOHAMAD ABDUL, Architectural Association, 35 Bedford Square, W.C.1.  
 MONROE : LEONARD, 27 Victoria Road, Penarth, S. Wales.  
 OAKLEY : WILLIAM OWEN, 28 Monthermer Road, Cardiff.  
 SMITH : FRANK HALLIBURTON, 10 Redington Road, N.W.3.  
 WATSON : JOHN (jnr.), 7 Church Road, Giffnock, Renfrewshire.  
 GREY : JOHN, The White House, Cobham, Surrey.  
 RITCHIE : JAMES WATSON, 8 Thirlstane Road, Edinburgh.  
 BOYCE : WILLIAM THEODORE PERCIVAL, Farmfield, Penicuik, Midlothian.

ALEXANDER : RICHARD RENNIE, 38 Lilybank Place, Aberdeen.  
 BRUCE : WILLIAM GEORGE HAY BLACK, 61 Watson Street, Aberdeen.  
 CALDER : HERBERT KITCHENER, 251 Westburn Road, Aberdeen.  
 DAVIDSON : JAMES HENDERSON, 16 Abercairn Road, Streatham, S.W.  
 DURNIN : LEO, 66 Blenheim Place, Aberdeen.  
 INGLIS : FRANK ALEXANDER GREIG, 286 Great Western Road, Aberdeen.  
 MORRISON : JAMES, 23 Upperkirkgate, Huntly.  
 ROBERTSON : ALBERT VICTOR, 14 Attadale Road, Inverness.  
 BEATY-POWNALL : DAVID HERMAN, 61 Oakley Street, Chelsea.  
 BUCKLAND : FRANCIS JOHN, 34 Bedford Square, W.C.1.  
 DUNPHY : NORAH, Donnybrook, Llandudno.  
 ERITH : RAYMOND CHARLES, 46 Albion Road, Sutton, Surrey.  
 FISHER : BARBARA SYBIL HOLT, 16 Grove End Road, N.W.8.  
 FISHER : WALTER ROBERT FITZGIBBON, 16 Grove End Road, N.W.8.  
 LLOYD : SETON HAWARD, 5 Harrington Court, S.W.7.  
 RUGG : ERIC, Hamlet Court, Westcliff-on-Sea, Essex.  
 SNAILUM : TERENCE WALTER, Central Y.M.C.A., Great Russell Street, W.C.1.  
 SOPER : DOROTHY ELIZABETH, Malcolm's Mount, Stonehaven, Kincardineshire.  
 THA TUN MAUNG : 138 Fellows Road, Swiss Cottage.  
 WARBURTON : GEOFFREY EGERTON, 1 St. James's Street, S.W.1.  
 LEY : ARTHUR HARRIS, Montague House, Sidcup, Kent.  
 WALLIS : DOUGLAS THOMAS, 84 Woodbourne Avenue, S.W.16.  
 \* This candidate is not a British subject, but has taken the examination for a certificate to that effect.

#### SPECIAL EXAMINATION IN DESIGN FOR FORMER MEMBERS AND CANDIDATES OF THE SOCIETY OF ARCHITECTS.

The Special Examination in Design for former Members and Candidates of the Society of Architects, to qualify for the Associateship, was held in London from 7 to 15 July 1926. Of the 9 candidates examined, 8 passed. The successful candidates are as follows :—

AVERY : HAROLD GRAVES, 5 Taviton Street, W.C.1.  
 CAVANAGH : EDMUND, 116 Nightingale Lane, Wandsworth Common, S.W.11.  
 DARBY : NICHOLAS HENRY NELSON, Silvermere, 79 Severn Road, Weston-super-Mare.  
 EVERSHED : SYDNEY FRITZ, Lloyds Bank Chambers, Oxted, Surrey.  
 FIRTH : JAMES ERNEST, 19 Tentercroft Street, Lincoln.  
 FORBES : ROBERT GERRARD, 23 Winchester Avenue, Brondesbury Park, N.W.6.  
 STUTTLE : BENJAMIN WILLIAM, 125 Wallwood Road, Leytonstone, E.11.  
 WADE : LEWIS EDWARD, 21 Chestnut Avenue, Stockton Lane, York (former candidate of Society of Architects, also passed in subject of Professional Practice).

#### R.I.B.A. PAMPHLET ON "THE ARCHITECT AND HIS WORK."

The pamphlet on "The Architect and His Work," compiled by the Practice Standing Committee with the assistance of the late Mr. Paul Waterhouse, Past President, has been issued by the Council with a view to bringing before the general public the functions of an architect and his use to the community.

Members can obtain copies of the pamphlet for circulation to their friends on application to the Secretary, at a cost of 2s. 6d. per dozen.



## Competitions

### LEAGUE OF NATIONS BUILDING AT GENEVA.

The conditions of the competition for the new building at Geneva have been received. The jury consists of I. H. P. Berlage (The Hague), Sir John J. Burnet (London), M. Charles Gato (Madrid), M. Joseph Hoffman (Vienna), M. Victor Horta (Brussels), President; M. Charles Lemaesquier (Paris), M. Karl Moser (Zurich), I. Attilio Muggia (Bologna), M. Ivar Tengbom (Stockholm). The competition will be open until 25 January 1927. Total cost including the architect's fees should in no case exceed the total sum of 13 million Swiss francs. Copies of the conditions may be obtained at the Secretariat, Geneva, at a cost of 20 Swiss francs.

### PROPOSED INFECTIOUS DISEASES HOSPITAL, DONCASTER.

Mr. T. R. Milburn [F.], the Assessor, has now made an award as follows:—

First Premium (£200), Messrs. Adshead, Topham & Adshead, 14 St. Ann's Square, Manchester.

Second Premium (£100), Messrs. J. H. Morton & Son, 15 Bank Chambers, South Shields.

Third Premium (£75), Mr. Charles A. Broadhead, 100 Rotherham.

### CENOTAPH FOR LIVERPOOL.

The Corporation of Liverpool invite architects to submit designs in competition for a Cenotaph to be erected on a site on the plateau in front of St. George's Hall, Liverpool. Assessor, Professor C. H. Reilly, O.B.E. [F.]. Prizes, £200, £150, £100, and £50. Last day for receiving designs 30 September 1926. Total cost £10,000. Conditions apply to Town Clerk, Municipal Buildings, Liverpool.

### RECONSTRUCTION OF THE MOSQUE OF AMROU, CAIRO, COMPETITION.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

### SCOTTISH LEGAL LIFE ASSURANCE SOCIETY:

#### NEW AND ENLARGED PREMISES.

The President of the Royal Institute of British Architects has nominated Mr. John Keppie, A.R.S.A., R.I.B.A., as Assessor in this competition.

### SCHEME FOR BUILDING LARGE RESIDENCES, CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competition.

### MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Herbert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, R.I.B.A., to act as a Jury of Assessors in connection with this competition.

## A CORRECTION.

The announcement which appeared in the last issue of the JOURNAL to the effect that the membership of Mr. G. H. B. Gould had been suspended for six months was incorrect, and the Editor greatly regrets that it should have been published.

## Members' Column

### VACANCY FOR STUDENT.

ARCHITECT (F.R.I.B.A.) has immediate vacancy for advanced Student or Improver (either sex) for training under personal supervision; view advancement; neighbourhood Baker Street. State full particulars.—Reply Box 9424, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### FORMATION OF PARTNERSHIP.

Mr. MOWBRAY A. GREEN, F.R.I.B.A., of 27 Queen Square, Bath, has taken into Partnership Mr. J. Herbert Hollier, and in future the business will be carried on under the name of Mowbray Green and Hollier.

### DISSOLUTIONS OF PARTNERSHIP.

The partnership which has subsisted between Mr. DAVID BARCLAY NIVEN and Mr. HERBERT HARDY WIGGLESWORTH for more than 30 years, under the style of Messrs. Niven & Wigglesworth, has been dissolved as from the 8th May 1926. Mr. Wigglesworth will continue to practise under the style of the late firm of Niven & Wigglesworth at 7 John Street, Bedford Row, W.C.1.

The partnership which was conditionally arranged between J. S. GIBSON, W. S. A. GORDON and JAMES M. WILSON, Architects, has been mutually dissolved so far as James M. Wilson is concerned. J. S. Gibson & Gordon will continue their practice at 5 Old Bond Street, W.1.

### APPOINTMENTS WANTED.

ARCHITECT (F.R.I.B.A. and F.S.I.), partner in old-established Northern firm but with the experience of sole charge of London branch office for 20 years, desires to assist temporarily London architect in some senior capacity, part-time or otherwise.—Reply Box 3853, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

ARCHITECT and SURVEYOR (A.R.I.B.A., P.A.S.I.) would assist London architects at own office for a very moderate retaining fee.—Apply Box 2172, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

A.R.I.B.A. desires position or partnership, preferably abroad. Has had experience of English County education and Colonial Government work, and has managed for the last three years a general practice abroad. Competitions, working drawings, quantities and supervision, used to construction in reinforced concrete. Photographs of work can be seen on application at the R.I.B.A.—Reply Box 2232, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### ASSISTANCE OFFERED.

LICENTIATE offers general temporary assistance to members, particularly in regard to Domestic, Scholastic and Isolation Hospital work, including: Designs, Working Drawings, Details, Specifications, etc. Successful in Competitions. Reasonable terms.—Reply Box 8385, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### APPOINTMENTS OR PARTNERSHIPS WANTED.

F.R.I.B.A., aged 40, at present insufficiently occupied, urgently requires senior position of trust with a view to junior or working partnership. Good health, keen and active. Excellent testimonials. 26 years' all-round London experience. Competent in design and construction, including good knowledge of constructional steelwork, reinforced concrete, and all up-to-date methods in factory and industrial building. Can commence immediately.—Apply Box No. 8384, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

ARCHITECT (A.R.I.B.A.), age 27, at present chief assistant with large West Country firm, desires responsible position or assistantship with view to partnership. Large experience in successful competition work, public buildings, shops, etc. Experienced surveyor and leveller. Excellent references. Write Box No. 8383, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

## MESSRS. BLENKINSOPP &amp; SCATCHARD.

Messrs. BLENKINSOPP & SCATCHARD, A. & L.R.I.B.A., Architects and Surveyors, of Bank Chambers, Castleford, have opened out a Branch Office at Cornmarket, Pontefract, Yorkshire, and will be pleased to receive catalogues, etc.

## MR. ARNOLD SILCOCK.

Mr. ARNOLD SILCOCK [A.] has recently returned to England from China, and has opened an office at 1 Raymond Buildings, Gray's Inn, W.C.1.

## TRADE CATALOGUES.

Mr. AUSTEN ST. B. HARRISON, A.R.I.B.A., M.T.P.I., P.O.B. 585, Jerusalem, would be glad to receive trade catalogues.

## ACCOMMODATION WANTED.

LICENTIAE requires desk accommodation, for few hours daily, in West End office, near Oxford Circus. Occasional assistance will be required by arrangement and some typing.—Reply Box 7112, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## OFFICES TO LET.

ARCHITECT (F.R.I.B.A.) wishes to let portion of his offices, adjoining Bedford Row, W.C.1; well lighted, quiet situation; telephone; vacant. Either two rooms at £75, three rooms £105, four rooms £140 per annum, all *en suite*. Might arrange mutual services.—Apply Box 1762, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## ROOM TO LET.

ARCHITECT (F.R.I.B.A.) wishes to let large room adjoining Lincoln's Inn, rent £70 per annum, inclusive of light and heating and fitted drawing table.—Reply Box 5331, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

## TO LET.

SMALL single office to let in good position, Victoria Street, third floor. Lift, and all conveniences.—Box 9867, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## FOR SALE.

RETIRED MEMBER (London district) offers for sale strong drawing table, 9 ft. by 2 ft. 10 in. by 3 ft. high, with three good lock-up drawers, well set back for knees.—Apply Box 1390, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## R.I.B.A. KALENDAR, 1926-27.

The Kalendar for the coming Session is now in course of preparation. Changes of address, etc., should be notified to the Secretary, R.I.B.A., 9 Conduit Street, W.1., as soon as possible.

ARCHITECTS' BENEVOLENT SOCIETY.  
INSURANCE SCHEME.

It is not perhaps sufficiently realised by members that all kinds of insurances can be negotiated through the agency of the Architects' Benevolent Society. The following list of insurances which have been effected recently gives an indication of the variety of the work that is being done:

Motor-cars, value £900, £400, £275, £110.

Building and contents of houses against fire and burglary, value £4,000, £3,000, £2,750, £1,200, £200.

Buildings in course of erection and alteration against fire, £19,200, £10,000, £1,100, £300.

Accident insurance, £1,000.

All risks, £200.

Life endowment and whole life, £1,000, £500, £200.

It is earnestly desired that all architects who are contemplating insurance in any form should communicate with the Secretary A.B.S., 9, Conduit Street, W., who will give immediate attention to all enquiries.

## R.I.B.A. JOURNAL.

The attention of all Members is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. This does not mean that members are expected to urge contractors and manufacturers to advertise in the JOURNAL; they can, however, do a great deal if they will read the JOURNAL regularly and avoid any needless depreciation of its advertising value.

## WARNING.

Members are victimised from time to time by impostors who call upon or write to them claiming to be architects in distress. Members are strongly advised before yielding to appeals of this character to communicate with the Architects' Benevolent Society (Telephone: Mayfair 043).

## NATIONAL HEALTH AND PENSIONS ASSURANCE.

The Architects' and Surveyors' Approved Society, 26 Buckingham Gate, London, S.W.1.

## CONTRIBUTIONS.

The contribution for men is 1s. 6d. per week, 9d. of which is payable by the employer, and for women 1s. 1d., 7d. of which is payable by the employer.

## ORDINARY BENEFITS (HEALTH INSURANCE).

*Sickness Benefit.*—Men, after 26 contributions have been paid, 9s. weekly; after 104 contributions have been paid, 12s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly; after 104 contributions have been paid, 12s. weekly.

*Disablement Benefit.*—Men and women, 7s. 6d. per week after 104 contributions have been paid.

*Maternity Benefit.*—40s. after 42 contributions have been paid.

## ADDITIONAL BENEFITS (HEALTH INSURANCE).

The recent valuation of the Society's assets having shown a largely increased surplus, the following scheme of additional benefits was brought into operation from 6 July 1925:

*Sickness Benefit.*—Payable at the increased rates of 22s. per week for men, and 19s. for women.

*Disablement Benefit.*—Increased to 11s. per week for both men and women.

*Maternity Benefit.*—Increased to 54s.

*Special Benefits.*—Grants made to members entitled to "additional benefits" for the full or part cost of optical, dental, hospital, nursing home or convalescent treatment, also for glassed surgical appliances, artificial teeth, etc. Members may choose their own dentists, opticians or institutions.

Forms of application for membership, also pamphlet detailing the benefits under the new Pensions Act, may be obtained from the undersigned.

HERBERT M. ADAMSON, Secretary.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to the method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

## R.I.B.A. JOURNAL.

Dates of Publication.—1926: 18 September; 16 October.



# Journal of the Royal Institute of British Architects

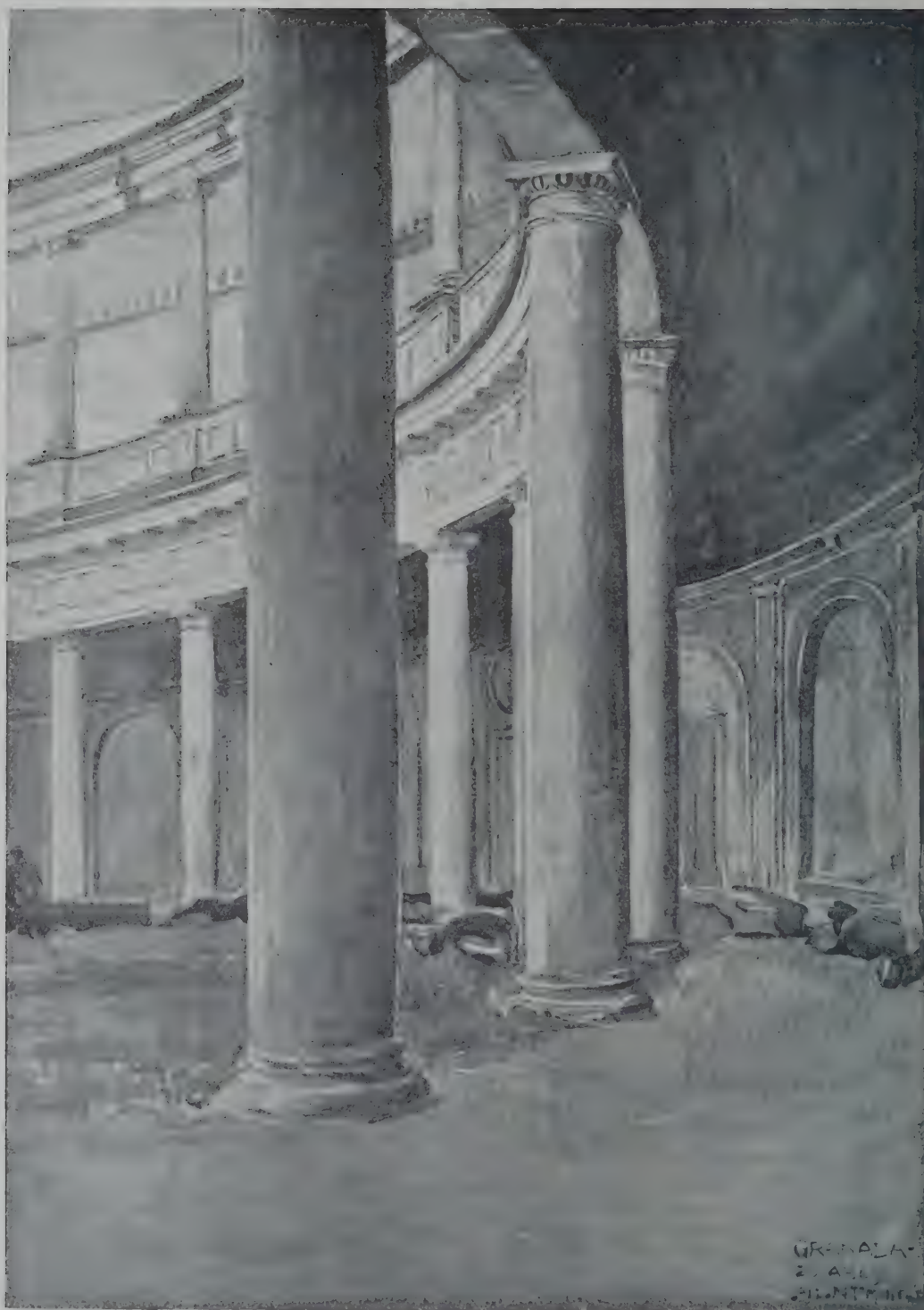
VOL. XXXIII. No. 19

THIRD SERIES

18 SEPTEMBER 1926

## Contents for 18 September 1926

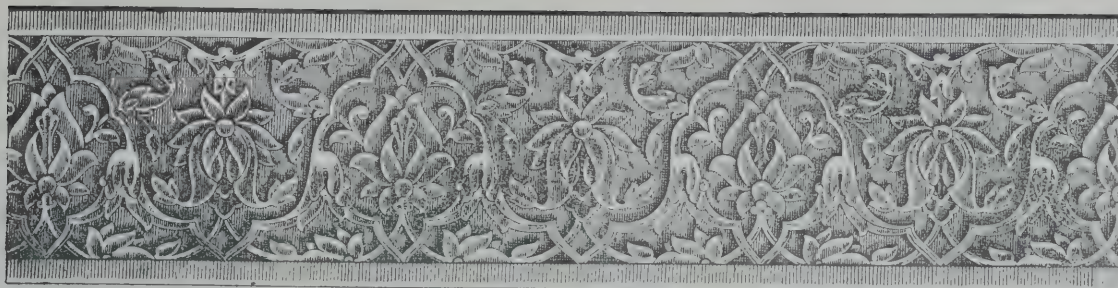
	Page
SPANISH RENAISSANCE ARCHITECTURE. Illustrated. By Professor Frank Granger .. .. .	555
AN ARCHITECTURAL HISTORY OF THE BANK OF ENGLAND: Part III. By H. Rooksby Steele .. .. .	562
SOME OBSERVATIONS ON STONE DECAY. By Professor A. P. Laurie .. .. .	573
CORRESPONDENCE :	
SCALE OF CHARGES. By W. E. Watson .. .. .	574
R.I.B.A. ANNUAL DINNER AND H.R.H. THE PRINCE OF WALES .. .. .	574
THE WREN MEMORIAL FUND .. .. .	574
MR. H. GODFREY EVANS .. .. .	574
OBITUARY :	
W. H. BRIERLEY .. .. .	575
C. E. SAYER .. .. .	575
J. H. MAYBURY .. .. .	576
ARNOLD J. T. ELLISON .. .. .	576
SOMERS CLARK .. .. .	576
GEORGE WITTET .. .. .	576
R.I.B.A. PROBATIONERS .. .. .	576
ARCHITECTS' BENEVOLENT SOCIETY .. .. .	582
EXHIBITION OF DESIGNS OF STUDENTS OF RECOGNISED SCHOOLS .. .. .	583
REGISTRATION AS PROBATIONER R.I.B.A. .. .. .	583
R.I.B.A. EXAMINATIONS .. .. .	583
NOTICES .. .. .	583
COMPETITIONS .. .. .	583
MEMBERS' COLUMN .. .. .	584



CHARLES V PALACE, GRANADA : INTERIOR OF COURTYARD  
From a water-colour drawing by A. N. Prentice, F.R.I.B.A.

R.I.B.A. Collection





## Spanish Renaissance Architecture

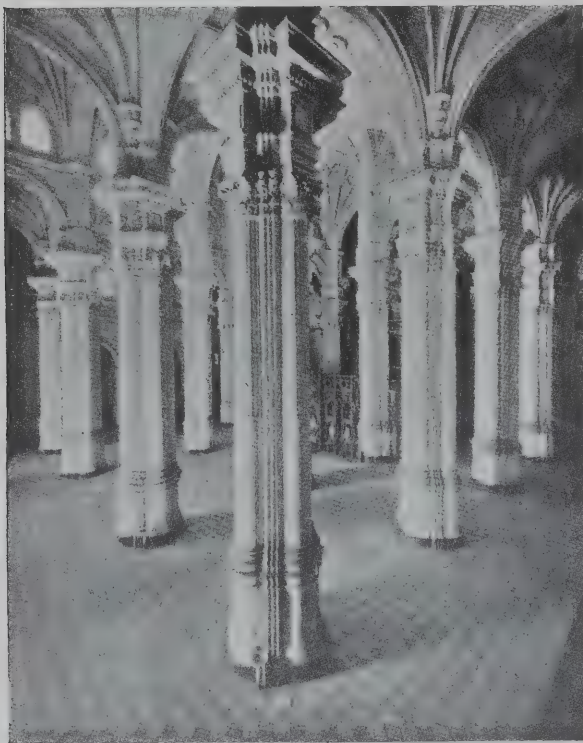
BY PROFESSOR FRANK GRANGER, D.LITT., M.A. (LOND.)

I  
 IN the Easter vacation of the present year [1926] I made a journey through Spain from Algeciras by way of Granada, Madrid, Toledo and Zaragoza to Barcelona. My purpose was to become acquainted with the development of the Spanish renaissance, and in particular to examine the manuscripts of Vitruvius in the library of the Escorial. It would be almost possible to write the history of Spanish renaissance architecture as a commentary upon Vitruvius. He largely inspired the plain style, the "desornamentado," in architecture. His parallel criticism of the successive styles of wall painting culminated in an attack upon the fantastic manner which is represented in the latest Pompeian houses. But the architects of Spain and the craftsmen whom they employed were never content for long with the plain style and broke away from the Roman master. The vivid and realist imagination of the Spanish people has always sought, and sometimes found, satisfaction in elaborate sculpture working upon the most varied materials, and in lifelike painting which set about to portray legends far removed from the commonplace. On the one hand architectural form attempted to satisfy by the mere balance and proportion of its masses. On the other hand sculpture, guided partly by an instinct for the picturesque in the literal sense, broke through the canons of building. Sculpture ceased to be merely applied to building: it became part of the building itself. The Caryatides of the Erechtheum, and the Telamones of Girgenti anticipate what is characteristic of the baroque developments of Renaissance architecture in Spain. The sculptor loses sight of architectural form and proceeds as if he were working upon the living rock. The various names, baroque grotesque and the recent term rococo, rightly suggest a treatment in the rough. Let us apply this

distinction to sculpture. There is sculpture which is self-contained. There is also sculpture which does not stand free of its background, but rises from it and seems to melt back into it. Rodin's "Balzac" is a case. Epstein's "Rima" is another. The grandest examples of this manner are the winged and human-headed animals of the Assyrian transept in the British Museum. But only confusion arises when sculpture which is, so to speak, extracted from the living rock is compared with pieces intended to stand free. Mr. Punch, whose judgment is so near infallibility when he occupies himself with the social scene, has an equal bent towards error when he deals with points of craftsmanship. His contrast of "Rima" with Gilbert's "Eros" is a case in point. He might just as well have blamed a Caryatid for not being the Venus of Melos. The aim of this discussion will be attained if the critic of Spanish architecture can bring himself to do justice to pictorial sculptors, even to Churriguera, or, if that is beyond his reach, to look with a sympathetic eye upon less extreme reactions against the style of the Escorial.

Let us now proceed to trace the alternating rhythm of movement towards and away from the plain style. Granada presents the transition from Gothic to the "Greco-Roman." The Fountain of Charles V bordering on the road which leads up to the Alhambra is unworkmanlike and ineffective in its design and sculpture. It prepares the critic for the Palace of Charles V above. The carving of the Palace is by Machuca, it is said, and not by Berraguete, to whom it has been wrongly attributed. (Berraguete began his career as a lawyer, but passed into the studio of Michael Angelo, and his sculpture is one of the greatest achievements of Spanish craftsmanship.) The Cathedral of Granada in the city below is by Diego de Siloe, and excels the architecture of the Palace as much as Berraguete excels

Machuca as a sculptor. Not yet, however, is the reign of Vitruvius. The grouped pilasters which form the piers of the interior are raised upon high pedestals, and a complete entablature requires to be supplemented by a second pedestal before it can receive the Gothic vaulting. As you look from a corner of the outermost of the five aisles across the church the effect is that of a mosque with its many columns. And yet the general harmony prevails, and Fergusson is justified when he places it among the finest works of the Renaissance. It may also stand as the type of a Spanish



GRANADA CATHEDRAL: GENERAL VIEW OF INTERIOR

cathedral. Whether Romanesque, Gothic, or Renaissance, the great Spanish churches are somewhat broader in proportion to their length than our Northern cathedrals. The aisles are often little lower than the nave, so that the piers rise nearer to the vaulting in the absence of clerestories. Consequently the Renaissance cathedrals of Granada and Zaragoza, for example, repeat the general interior effect of the Gothic cathedrals of Barcelona and Zaragoza: the cross perspectives multiplying the columns which can be taken into a single view. The fact that the Arab mosque or the Jewish synagogue in the Arab style has the same kind of effect is not due to chance, but to the ultimate

origin of all in the pillared basilicas of Greece and Rome. The former synagogue at Toledo, now Santa Maria la Blanca, with its forest of columns may carry us as far back as the Hall of Mysteries at Eleusis for a parallel.

There is another feature, reaching not so far back indeed, but to the earliest Christian churches, which contributes to the haunting mystery of which this branch of Spanish architecture possesses the secret. The choir is placed west of the crossing and with its enclosure fills a great part of the nave. The sculptors seized the opportunity offered by the choir stalls to raise tier upon tier of carving. The structures which thus came into being filled the centre of the plan, closing in from every standpoint the view of the floor. The eye of the observer, seeking unity, was inevitably lifted towards the vaulting; or, to put the same point another way, the absence of windows near the ground was turned to account for the many chapels which declare the variety of catholic devotion. The lighting was limited to the top of the wall, and thus only the upper reaches of the building were illumined. When the windows were filled with stained glass, the gloom became so great that sometimes, especially at Barcelona, it took several minutes for the eye to distinguish its surroundings. This darkness, so grateful to the eye dazzled by the glare of the sun, and so medicinal to the mind, was therefore the unintended effect of, first, the need of an unbroken lower wall on the outside for security's sake; second, the lofty aisles and the absence of a triforium; third, the place of the choir; fourth, the stained glass of the windows.

But in turn this darkness added to the illusion of plastic art. The coloured sculpture, often of life-size figures, and the altar paintings, in which Spanish realism portrayed to the life the national types which moved along the street outside or knelt devoutly on the floor within, seemed to mingle earth with the company of the skies. In this same gloom the lavish employment of gold lost its garishness, and the total effect became one of a melting splendour.

## II

The question of architectural style is therefore intimately connected with craftsmanship. Throughout all the alternating manners in which the architectural problem was solved the Spanish architects, sculptors, painters, and workers in gold, silver, and iron carried on a tradition, which was sustained by the unity of the national life and has come down to the present time. The modern church of San Francisco el Grande in Madrid, for example, might have been built any time within the last four hundred years. It is a typical domed Renaissance church. What dates it is the decoration. The cathedral or other large church, or even the small church, furnished the background for the skilled craftsman. The retablo of the capella





INTERIOR OF SANTA MARIA LA BLANCA

mayor, the altarpieces and the sculptured figures of the chapels, affect the spectator much in the same way whatever the cathedral he is visiting. It is on a further view that the architecture and the sculpture disclose their relationships.

The Spaniards have occupied themselves with discussing these among the other problems of æsthetic criticism, and it is a surprise to the foreigner to discover that Spain is a rival of Italy not only in the beauty of her buildings and craftsmanship, but in the interpretation of that beauty. The history of Spanish renaissance architecture requires for its comprehension the *Historia de las Ideas Estéticas en España*, by Menéndez y Pelayo, who has fulfilled for Spain a task which still awaits the labourer in most other fields. I am glad to be able to draw upon the first chapter of his fourth volume, which discusses the treatises upon the plastic arts. In the light of that chapter we can divide the history of Spanish renaissance architecture into periods according as the architect or the craftsman has the upper hand.

First, there is the style called alternately "plateresque" (from the resemblance of its decoration to the embossed work of the silversmiths, *plateros*) or "de Berraguete" (from the great artist).

Second, there is the "desornamentado," the plain style, in which the craftsman is still employed, but in stricter subordination to the architect. Of this style the Escorial is the masterpiece.

Third, there is the reaction towards the baroque which culminated in the work of Churriguera.

Fourth, the Greek reaction, which is represented by the Museum of the Prado.

Lastly, the modern mixed style, which has recently produced masterpieces worthy of comparison with the greatest achievements in the work of the late Antonio Gaudí at Barcelona.

But there has never been a complete break between any period and the next such as that which has shattered the English architectural tradition since 1840.

### III

The style of the "silversmiths," *plateros*, has been practised elsewhere and at other times than in Spain. The same term *caelatura* is applied by Pliny the Elder both to the carving of the lower drums of the columns at Ephesus and when he is speaking of raised work in silver. The silversmiths of Ephesus who took alarm at the iconoclasm of St. Paul were doubtless engaged also upon stone carving; for the combination of work in metal with sculpture in stone and marble was a tradition there. Theodorus, the architect of the earlier temple, was himself both a sculptor and a worker in the precious metals.

The motive of the carved column was seized upon as early as the third century B.C. by the Buddhist

artists of India. But it was left to the Romans to give continuity to the sculpture by adopting the spiral. At least I cannot recall any earlier example than the column of Trajan. The reliefs of the column were the object of enthusiastic admiration and study by the early Renaissance masters and their pupils. When, therefore, Berraguete returned to Spain from the studio of Michael Angelo, he brought with him the influence of the unknown masters of the column. It is noteworthy that Trajan himself was a Spaniard born near Seville. Nor must we forget as another point of contact with Spanish art that the column of Trajan was lit up with colour and gold. At any rate, we may attribute to the Roman studies of Berraguete some of the fine advance which his work displays over the bas-reliefs of the Palace of Charles V at Granada; so that in a sense Spain took back from Rome what she had lent in the person of Trajan.

But Spain does more. The controversy which rages among the critics about the origin of later classic art and about its æsthetic value takes a new illumination from the Spanish analysis of the history of art. We need neither go to the East with Strzygowski for the origin of later developments, nor with Wickhoff claim all manner of subtle theories about three dimensional treatment to explain the efflorescence of ornament under the early Roman Empire. Whatever secrets there were, lurked in the silversmiths' and copper-smiths' shops.

The peace that Spain enjoyed after the conquest of Granada gave employment to many craftsmen. And their work literally encrusted the great churches and other buildings. This magnificence corresponded to the mundane splendour of the Renaissance princes, Henry VIII, Francis I, and Charles V. By a parallel reaction in England and Spain, Henry and Charles were succeeded by the only puritan monarchs who ever sat on their two thrones, Mary of England and Philip of Spain. And the temper of Philip was displayed in the inauguration of a new architectural style, the *desornamentado*.

### IV

*The psychology of Philip II* is a key to the history of modern Spanish art. Only last year (1925) Sr. Perez-Minguez published in Madrid a study under this title, to which the reader may be referred for confirmation of the considerations now to be advanced. We must put out of our minds, as architectural students, the share which Philip had in the Inquisition, and concern ourselves with him from our own standpoint. His comprehensive mind took in the whole scope of the Italian Renaissance. Like his father, Charles V, he was a patron not only of Spanish, but of Flemish and especially Italian artists. He was a connoisseur not only of architecture, but of painting and sculpture.



His puritanism was an attitude to the arts as much opposed as any other such attitude to iconoclasm.

fantastic licence in which the plateresque designers had indulged. In these and other ways he created a new back-



THE ESCORIAL, NEAR MADRID

His plain black velvet dress, his disuse of jewels, went along with the sober magnificence of his court. To him the rigid tenets of Vitruvius appealed as a check upon the

ground for the national life; the style of the Escorial is a symbol of the dignity and reticence which amid all passing extravagances have yet characterised the Spaniard.

In the Escorial the economy of ornament itself becomes a style. The Stockholm Town Hall, the lower end of Regent Street, and the new University buildings at Nottingham show how impressive such an economy may be made. The description of the Escorial by the architect himself, Juan de Herrera, of which, by a happy accident, a copy lies before me, is in a style as reserved as that of the building. The French invaders in 1808 dismantled the high altar of the church, but its architecture still remains. The interior, with its at first oppressive plainness, anticipates the general effect of St. Paul's. When we find Wren discussing the work of a Spanish architect, Villalpando, who carried out for Philip II the staircase of the Alcazar at Toledo (*Parentalia*, ed. 1903, p. 242), we may fairly assume that Wren would know something about the design of the church of the Escorial. Like Herrera, Wren inclined towards simplicity; like Wren, Herrera enriched his architectural effect by calling in the craftsman. The retablo and the tabernacle of the Escorial were by a Milanese artist, da Trezzo, whose work lit up the Spanish church as Grinling Gibbons did the work of Wren. The note, therefore, of the *desornamentado* style is not the lack of ornament, but its strict subordination to an architectural scheme. However, from the sublime to the ridiculous is a step which was taken at the Escorial. The exterior is sprinkled with stone balls, perhaps the best example of the unconscious architectural grotesque in Spain.

## V

The Town Hall of Toledo carries on, with a certain added grace, the tradition of the Escorial. The reaction against the Escorial culminates in the cathedral of El Pilar at Zaragoza; the architect gets out of hand, nor is the craftsman more restrained. The building is a fantasy in which the exterior of the domes, with their brilliant green and white and yellow tiles, announces some kinship with the Moor.

The Spanish character was forged on the anvil of Islam. The cruelty of Philip and—the other stumbling-block for the Anglo-Saxon—the bull-fight can be understood in the light of the age-long conflict between the Spaniard and the Moor. This interpretation of the Spanish cathedral came to me like a flash on Low Sunday in the front of the Chapel of the Pillar in the cathedral at Zaragoza. "This *Pilar*," says Ford, "is the consolation and support of the people of Zaragoza in peace and in war." Spreading, then, like others, my handkerchief on the ground, I bent my right knee upon it in order to gain among the pious throng a closer view of the interior of the chapel and of the famous image of Our Lady. Near me a young soldier, accompanied by an older man, probably his father, was paying his devotions on the eve perhaps of joining the Spanish forces in Morocco. Even a philosopher

would have admitted that superstition in this case, conceding for the moment that it was such, was not more irrational than the Quixotic campaign in which the youth was caught up without his consent previously got, though not necessarily against his will. Just such an incident might have been seen in any Spanish church throughout the twelve centuries that separate the present from the invasion of the Saracens under Tarik in 711. The impassioned splendour of the great Spanish cathedrals was now to be comprehended, set against an historical background which was



TOLEDO CATHEDRAL: THE "TRASPARENTE"

continuously the same, whether we look at the foreign relations or at the Spanish character itself. The geographical isolation of the Peninsula, placed like an outpost towards Africa, went along with an intense national feeling in which religion, chivalry and patriotism were blended beyond all possibility of separation. Against this rock the heretic, the foreigner and the industrial revolution have surged in vain. Barcelona, herself the headquarters of modern innovation, is raising a church of cathedral dimensions and of incredible audacity, in which even the hostile



critic must recognise the blending of tradition with the living voice of architecture itself. Persons who have not seen the *Sagrada Familia* of Don Gaudi will probably not believe any description of it; I have seen the building in progress, and was in bare truth unable to believe my own eyes.

In Don Quixote one part of the Spanish character is embodied, and at the same time separated from the other part, of which Sancho Panza is the adequate representation. Along with the romance, which is a vision of life rather than life itself, there is a strain of realism in the Spanish character. This realism is seen in the painting of Velasquez and of Goya, and scarcely less in that of Murillo, whose picture of St. Anne teaching the Virgin might be the portrait of a Spanish lady with her little daughter. It is carried to its utmost limits in the coloured carving in wood and marble which often seeks an illusion like that which we associate with Madame Tussaud's. The vivid imagination of the Spaniard is not satisfied with less. I remember a figure of a knight on horseback high on a wall overlooking the great altar of a cathedral, which I thought at first was a representation of a pious donor, but was really intended for St. James himself. It then occurred to me that the clue to the extraordinary richness of Spanish plastic art was to be found in the popular demand for the pictorial rather than the verbal utterance of religious ideas. But this was not all. The demand alone could not create the supply. For the latter there was required the creative genius working upon appropriate materials. And the Spanish architects appeared as the means whereby the background for painting sculpture and metalwork was furnished to the Spanish craftsmen in those kinds. The variety of Spanish genius, its response to

the emotional demand of religion and patriotism, is seen in *their* work not less than in the literature which goes parallel with the plastic arts. The austere and didactic mind of the literary critic is raised to a frenzy by the free creations of the muse of Gongora. A similar indignation seeks expression in the presence of the "trasparente" at the cathedral of Toledo; Ford does not allow "much invention and great workmanship and mastery over material" to outweigh its absurdities in the balance. The "trasparente" is a riot of bronze and varied marbles rising in earthly and angelic forms to a heaven of which the clouds are made of cardboard. The visitor to Venice may be reminded of the Valier monument in San Giovanni e Paolo.

But our English criticism of the Victorian age is more than baroque. It is not enough to dismiss the Escorial with Hayter Lewis as "cold and repulsive," and the Churrigueresque as a travesty of Italian rococo, nor to say, with J. H. Middleton, that in the England of Wren "architecture had sunk almost to the lowest point of degradation." Or, to take another example, the church of San Moise at Venice, according to Ruskin, was "one of the basest examples of the basest school of the Renaissance." But I learnt at San Moise to look for the charming figures of tiny children in which so often the later Renaissance expressed its delight. And generally the buildings we have been considering, in whatever particulars they fail, are sufficient evidence that architecture and the allied arts are capable of enriching human life not in one style alone. It is the function of a serious architectural criticism to go down to first principles, and if possible to deduce from them some sort of guidance, and for this purpose Vitruvius cannot be dispensed with.

# An Architectural History of the Bank of England

## Part III

BY H. ROOKSBY STEELE [A.].

### CHAPTER V.

#### SCENE—THE MIDDLE PERIOD: 1800–1818.

In 1800 the growing activity of the Bank called for additional accommodation. The sanction of Parliament

and Sampson's façades in order to render the whole exterior homogeneous. This ambitious project was not agreed to in its entirety by the Directors; instead, Soane was instructed to concentrate on the new boundary line only and the site behind it. As with his first extensions in



FIG. 24.—1833. THE BANK COMPLETED  
The termination of Soane's long stewardship. New Bank Buildings and the National Debt Office are opposite "Tivoli Corner"

was obtained to enable the bend in Princes Street to be straightened out and the property between the new line and Lothbury was acquired, part of the Grocers' Hall garden disappearing in the process (Fig. 24). Soane at once prepared a scheme for extending his screen wall right round the Bank, contemplating the removal of Taylor's

Lothbury, he at once proceeded to erect a protecting wall, leaving the buildings within to develop as the need arose.

The new frontage to Lothbury was just as long again as the original north front: the duplication of the existing façade which this suggested was carried out, with the



addition of the blank windows, which were also introduced for the first time in the older portion (Fig. 25). The rounded corner which led into old Princes Street needed revision. Soane had, at first, hoped to place a hexastyle portico here marking the centre of the whole façade, but the encroachment it would have made upon the street was objected to and he had to be content with a much narrower projecting feature, composed of two antæ and two pilasters, the latter embracing a single blank window, whilst the whole was crowned with a small attic in which he incorporated a short classical balustrade. The balusters were removed by Cockerell in 1848 and the space between capping and base filled in with plain stonework. The

was encouraged by the lack of a firm contract with the builders: all work done at the Bank by Soane being measured on completion by him and paid for on that basis. The building of the "Corner" dragged on for three years: the ultimate result is undoubtedly a very beautiful composition, effectively masking the angularity between the two street façades and creating a monumental feeling entirely in keeping with the dignity of the Bank (Fig. 26).

The old buildings were soon cleared from the site behind the new walls and the final series of courts and halls by Soane was quickly put in hand. Of these the Governor's Court was perhaps the most original and



FIG. 25.—LOTHBURY AND PRINCES STREET IN 1828  
A drawing by Shepherd

introduction of pilasters denotes a change of faith on the part of Soane, who had hitherto been emphatic in his use of the Greek "anta," in which the capital differs entirely from that of the column. The remains of the original corner with part of the wall down old Princes Street, are still in existence and show quite plainly in Fig. 24.

At the same time as the Lothbury wall was being built (1802) the new Princes Street wall was in course of erection. Taylor's wall in the lower half of Princes Street remained for the time being: it was crowned with a balustrade and Soane was led (probably much against will) to place a similar feature above his cornice with some idea of producing homogeneity in the whole façade. The "Tivoli" corner was not commenced till 1804: the design for it was in a constant state of flux, Soane making hundreds of sketches and being seemingly unable to settle in his mind what the final form should be. This vacillation

typical of the architect's skill. It was a four-sided courtyard lying immediately to the north of the Governor's and Deputy-Governor's rooms. The South, East and West walls were all treated with an attached-column motif running through two storeys and standing on a rusticated basement which was pierced with round-headed windows. The columns were of the same height and had the same capitals as those in the external order, but their shafts were unfluted, and flanking each group was a pilaster, without entasis, having a capital similar to those of the columns. The North wall of the Court was really an open gallery or loggia and formed quite one of the most interesting elevations that Soane ever produced (Fig. 27). Its basement was a free rendering, with the three low-pitched arches and curious bastions on the piers between, of the famous Triumphal Bridge design that had gained him the Gold Medal in 1776. Above the arches was a blocking

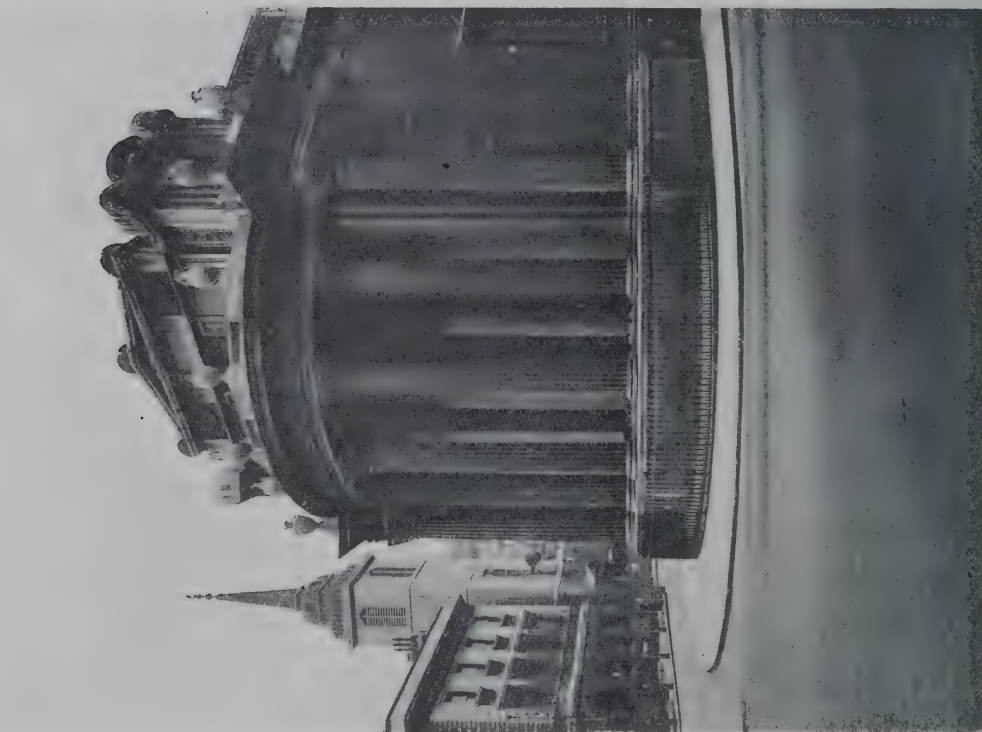


FIG. 26.—“TIVOLI CORNER,” 1804-7  
The inner two columns are unfluted

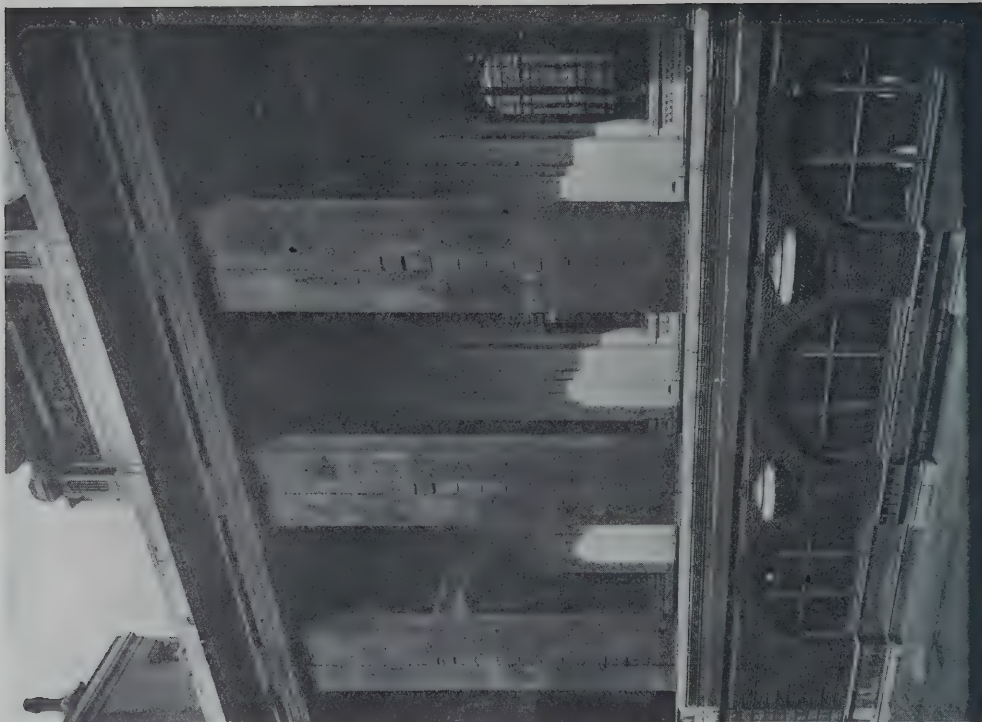


FIG. 27.—LOGGIA IN THE GOVERNOR'S COURT  
The arches in the basement were originally open, giving the Triumphal Bridge motif greater meaning



decorated with an elongated fret, as on the other three sides, and rising from this, over the piers, were four pairs of coupled antæ which supported an entablature that was repeated in the rest of the Court. The three spaces between the pairs of antæ were entirely devoid of solid, but the end antæ were connected to the return walls by short lengths of stone walling. The latter were removed, to the detriment of the elevation, as recently as 1891, in order to give more light to the large office which abuts on the north side of the Loggia.

This office was built by Soane at the same time (1804-5) as the Governor's Court, for dealing with the five-pound

compositions of two half-columns and two pilasters, those at the West end framing two glazed lunettes, one corresponding in height to the semi-circular heads of the windows in the main wall face and the other lower down at the back of a deep recess under the first.

Concurrently with the Governor's Court and the Five Pound Note Office, the Princes Street Entrance Vestibule was built (Fig. 29).

This was placed on the line of the Loggia, to which it ascended by three flights of three steps from the street level. Up to and including the cornice the style adopted was Greek Doric, based directly on the remains which



FIG. 28.—THE £5 NOTE OFFICE  
Now Public Drawing and Branch Banks Offices

banknotes (Fig. 28). It is considered by some to be the most magnificent room in the Bank, for with a length of 66 feet and a width of near 40 feet it is spanned by a segmental coffered ceiling of lath and plaster, suspended from massive queen-post roof trusses. Half-columns of the Ionic order, standing on a base at the level of the window sills, were spaced along the side walls at the same divide as the antæ of the Loggia, with a tall semi-circular headed window in each bay, those in the south wall looking through the Loggia into the Governor's Court. Originally there were only three windows on this side, the two flank bays having blank recesses, which were opened up at the same time (1891) as the end bays of the Loggia. Three coffers at each end of the ceiling were also cut out at this period and glazed in the endeavour to secure more light. The West and East walls were treated with portico-like

Soane had seen at Pæstum, but above the cornice the treatment was Roman. The main part of the Vestibule was twenty feet square, with wide openings in all sides, those on the north, south and west spanned by the Greek entablature which was supported on pairs of columns. The fourth opening, towards the Loggia, was prolonged as a secondary Vestibule and covered with a shallow-coffered barrel vault, the termination of which in the main hall was repeated as a lunette in each of its other three sides. (Only the north and south lunettes were glazed: that on the west was filled in solid.) A dome, which developed from pendentives between the lunettes, rose to a height of 33 feet above the floor: a circular skylight since inserted in its crown destroys the charm of the original side lighting without greatly increasing the illumination. It is to be regretted that in many other cases at the Bank the carefully

calculated effects of light and shade that Soane aimed at have been upset by similar "improvements," the necessity for which might never have been apparent had the original windows received their due amount of cleaning.

There is one minor criticism of this Vestibule that can be made. Owing to the floor being at three different levels and the entablature carrying unbrokenly round, the Doric columns, which are of course baseless according to Classic

of Princes Street when the time came for the rebuilding of Taylor's wall. This would have rendered the elevation more nearly symmetrical than it now is: true symmetry would not have resulted however, for the features at the north and south ends of the wall would have been respectively a two-columned recess and a doorway. If the inclusion of this second doorway is assumed and a length of wall (corresponding to that at the north end of the street)



FIG. 29.—PRINCES STREET ENTRANCE VESTIBULE. Looking through to the Loggia

tradition, have varying heights, but the same diameter, producing an unstable effect which might have been avoided had plinths, at the level of the highest floor, been run out from the walls to carry the taller columns.

The entrance doorway in Princes Street, in itself quite modest in character, was marked externally by an arcaded attic above the main entablature. It was Soane's intention, as a water-colour by Gandy in the Museum distinctly shows, to repeat this doorway and attic in the lower part

is set out to the south of it on the final plan, it is found that the façade would be shortened by some twelve feet. This fact seems to indicate that Soane meant the Princes Street-Threadneedle Street junction to be a much larger curve than it is and more nearly a repetition of the "Tivoli" corner.

The remainder of the north-west angle site was devoted to the Printing Department, grouped round three sides of a large court into which the Five Pound Note Office also



looked. An interesting coincidence was provided some seven years ago when the Printing Department of the Bank moved into the old Hospital of St. Luke's, in Old Street, erected in 1786 by the younger Dance, with whom Soane had been a pupil. They were both competitors for the design of this building; Soane's unsuccessful effort may be seen in the Museum. The basement of the building on the north side of the Printing House Court

to the College of St. Martin-le-Grand. Stow records that from being "a fair brook of sweet water" it had degenerated by 1288 into an open sewer, and in the time of Henry V it was vaulted over, and, houses being built upon it, its course was forgotten. Sir R. Phillips, in his *History of London* (1805), says he saw the Wallbrook, in November 1803, still trickling amongst the foundations of the new buildings at the Bank. Its effect upon these



FIG. 30.—"THE DIAGONAL PASSAGE"

A typical creation of Soane's, forming a connection between his Rotunda and the Front Courtyard

was designed as a Barracks: its rather crude and un-Soane-like façade still remains in part, facing the present Workmen's entrance in Lothbury.

Soane had a good deal of trouble, during these last extensions, from the Wallbrook, which ran underground across the site in a line from St. Margaret's Church, Lothbury, to about the middle of Princes Street, and thence by the west side of the Mansion House to the Thames. In early times "the ancient Walbrook, or river of Wells," was mentioned in a charter of William I

is quite marked at the present day; both the Lothbury and Princes Street walls have sunk towards the middle and in the north wall of the Five Pound Note Office there is also strong evidence of settlement.

At the close of the "Tivoli Corner" period, Soane erected (1807-10) five houses, known as New Bank Buildings, on the opposite side of Princes Street. They were occupied by resident officials of the Bank till their demolition in 1904, the late Dr. Freshfield, Solicitor to the Bank, having been born in one of them in 1832. At

the back of New Bank Buildings the National Debt Redemption Office was built in Old Jewry by Soane in 1818-19: it included a cenotaph to Pitt, the Statesman, and was afterwards extended round the Gresham Street corner by Cockerell to join up with the houses.

In 1815 Taylor's Vestibule between the Rotunda and the Front Courtyard was pulled down, Soane replacing it with a smaller room, the Outer Treasury, and a new entrance to the Rotunda (Fig. 30). The latter occasioned

## CHAPTER VI.

### SOANE—THE FINAL PERIOD: 1818-1833.

The final reconstruction of Taylor's halls took place in 1818-23, when the office to the south of the Rotunda and the one adjacent to it in the south-east angle of the building were gutted and re-erected by Soane in the approved "fireproof" manner. In general form they were identical: their dimensions were alike and they had



FIG. 31.—THE OLD DIVIDEND OFFICE

- The richness of the lantern is set off effectively by the simplicity of the lower structure  
This hall was recently demolished

some skill in planning and construction, for after entering "normally" from the Front Courtyard it changed direction and was driven diagonally through the south-west corner of the base of the Rotunda, which it reached by way of one of the semi-circular recesses. So closely did one side of this diagonal passage approach the corner of the office on the south side of the Rotunda that there was only the thickness of a sham door between them.

the same semi-circular fluted arches which ran down to the floor without any break at the springing line. Their arrangement with four piers, lantern-topped dome and side vaults, followed the line of the earlier reconstructions. It was in their decoration and the form of the central lantern that they differed from one another. The latter feature in the hall to the south of the Rotunda, known as the Old Dividend Office, was the most elaborate that



Soane produced at the Bank (Fig. 31). It was in two tiers—the lower, eight-sided and glazed and having eight pairs of Caryatides on pedestals standing round the rim of the truncated dome. The upper tier, supported by the figures, was circular and also glazed; the rich effect of the whole being enhanced by the plain treatment of the dome under. The lantern of the other hall, the Colonial Office, was much simpler: it had eight sides containing windows and sixteen Ionic columns round the eye carrying the flat-pitched roof. An interesting point of detail is illustrated by the cupboards which lined the walls of these two halls. The cupboards, themselves of wood with flush-beaded panels in the usual

Bank, so prominently in the public eye, should have fallen to Soane's hand when he was an old man of seventy; it lacks the spontaneity of the Lothbury Front of thirty years before, and gives one the impression, with its multiplicity of forms, of overcrowding. It is only fair to Soane to record that the railing which stands at the base of the wall was placed there against his wish, and that the later additions to the attic by Cockerell, though skilfully devised, tend by their greater height to dwarf the original façade. Another failing of the Threadneedle Street front is the lack of sufficient emphasis in the podium, the height of which diminishes to nothing at the east end against Bartholomew Lane. It is fairly



FIG. 32.—THE BARTHOLOMEW LANE FRONT

A Shepherd drawing of 1828. The difference in levels between the back and front of the Bank is emphasised by the diminishing podium

Soane style, were surmounted at intervals by crestings or scrolls which appeared, without minute examination, to be also of wood. On closer inspection, however, they proved to be plaster casts, painted in simulation of woodwork. This sham shows how Soane was able to keep down his costs: a dozen repetitions in plaster from one mould would be much cheaper than a dozen individually-carved wood ornaments.

The last work of magnitude undertaken by Soane at the Bank was the rebuilding of Taylor's screen walls in Threadneedle Street, Bartholomew Lane and Princes Street and the refacing of Sampson's centre (Figs. 17 and 18). The former was in hand from 1823-25, the latter following in 1825-27. It is a pity that this part of the

certain that Soane, in fixing the level of the podium in his earlier work in Lothbury, did not foresee that one day his wall would surround the whole Bank, or else he would have made due allowance for the difference in levels of the two streets (which, at the greatest, is now 8 feet 4 inches) and have arranged his base line some 2 or 3 feet higher. The lack of height is the more emphasised at the present time by reason of the general rising of the surrounding streets, which are now nearly a foot above their level in his days.

In refacing Sampson's façade, Soane adhered to the number and position of the window and door openings and the spacing of the columns, but placed the latter at ground level and detached from the main wall. At the

same time he made his upper range of windows the taller—reversing Sampson's arrangement—and built round them an attic which was somewhat out of scale with the portico beneath. The two flanking wings were rebuilt without any regard for Taylor's setting out, and without any similarity in treatment, unless we admit a connection between the end pavilions of that architect and the compositions of four antæ which Soane placed on either side of the colonnades in the new walls. Against his practice of designing the screen wall without relationship to the inner buildings, Soane managed to make the centre of the colonnade in the eastern wing coincide exactly with the axis of the Rotunda and the Old Dividend Office.

The new wall in Bartholomew Lane was composed of the same elements as the duplicated screens in Threadneedle Street, only the quantity and arrangement varying (Fig. 32). Thus there was a central colonnade of eight columns (the front colonnades had six each), large blank windows flanked by single antæ instead of pairs, and small blank windows placed in the main wall instead of at the back of the colonnaded recesses. The doorway leading to Taylor's Vestibule was designed in harmony with the larger windows. The effectiveness of the colonnade was not so marked in this street, as, with an easterly aspect, the play of the sun on the sturdy columns was only available in the early morning.

The Princes Street façade was completed by building a plain length of walling, containing seven blank windows, from the Threadneedle Street corner to a new two-columned recess adjoining the northern portion already built, thus making the front to this street, as we have already seen, the only unsymmetrical elevation of the four enclosing the Bank.

Both ends of the Threadneedle Street façade were connected with the side streets by rounded corners, consisting of recessed walling and two columns "in antæ" reminiscent of the junction between Bartholomew Lane and Lothbury.

There is an interesting report of Soane's on Taylor's fronts—which he submitted to the Directors in May 1823, before the actual reconstruction of them began—in which he estimates that to rebuild them in the style of his Lothbury front without thickening the arcaded recesses and without rounding off the corners would cost £10,000, the extra involved in carrying out these two improvements only amounting to another £2,000. The full scheme, which Soane strongly advised, was adopted, and with its completion in 1827 the time of his activity at the Bank was drawing to a close.

In 1824 he had laid out the Garden with various flowers, shrubs and cedars. Two of these trees were still growing in 1852, as is shown by an old photograph at the Bank taken by Sir W. Newton in that year. There is only one tree in the Garden now, and it is a lime.

Exactly forty-five years after his appointment, Soane retired from the position of architect to the Bank of England on 16 October 1833. Two years previously he had been knighted. The whole cost of the building works—including fittings, furniture and even illuminations at times of national rejoicing—during the period of his stewardship amounted to less than one million

pounds, and on this he drew his 5 per cent. commission, which covered the making of estimates and the measuring up of all work on completion. He never exceeded his estimates and was rigorous in his examination and cutting-down of contractors' charges.

The Bank is a monument to his skill as a constructive artist. Whilst a keen student of all preconceived forms of architecture, he was not content to adopt any one style as a medium, but drew from each the part that attracted his original mind the most, welding the whole into a composite mass that delights or repels the critic according to the nature of his bias. The great flaw in Soane's work is the uncertainty which marks it: uncertainty both in proportion and decoration which he confesses in the multitudinous alternatives for each new design. Had he not been of an exceptionally tenacious nature he could have withstood neither the wavering of his own imagination nor the various set-backs and trials which he encountered during his long life. He died, after four years of well-earned retirement, at the age of eighty-four

## CHAPTER VII.

### THE FOURTH ARCHITECT—C. R. COCKERELL: 1788-1863

Professor Cockerell was the successor to Sir John Soane at the Bank. The structure had by this time arrived more or less at its final form, and there remained little, apart from general works of maintenance, that he could do. In 1835 he was engaged in the reconstruction of Taylor's Dividend Warrant and Cheque Offices, which lay between the south wall of the Garden and Soane's façade to Threadneedle Street (Fig. 33). The five Venetian windows looking into the Garden were retained and their form repeated at each end of the new hall and across it in the middle as a screen. The whole room was divided longitudinally into three aisles by two rows of Corinthian columns in pairs, the side aisles being ceiled just above the window heads, but the centre aisle rising to twice the height between the walls of an extra storey that was provided over the side divisions. There was a skylight over the whole length of the centre division, and this gave light not only to the ground storey but also, through borrowed lights, to the first storey compartments. Further, the new upper storey rising to a greater height than Taylor's Garden wall, an attic with windows was necessitated over the latter. As soon as 1850 Cockerell was again ordered to rebuild this part: the columns were removed, the upper storey disappeared. Taylor's old office in the south-west corner was gutted, together with the room alongside to the north, and the whole was thrown into one large L-shaped hall, covered with a lantern-pierced ceiling spanning from wall to wall.

The Chartist troubles of 1848 occasioned the directors some alarm and, as a preliminary precaution, the Princes Street doorway and the centre entrance of the three in Threadneedle Street were bricked up, remaining thus till 1882. At the same time the parapet was sand-bagged and cannon were placed in advantageous positions on the roof of the Bank commanding the streets and special constables patrolled the latter in great numbers. It was this scare that led to Cockerell's additions on the



top of Soane's outer walls (Figs. 17 and 34). The existing attic was everywhere raised and redesigned; an entirely new balustrade was introduced with loopholes through certain of its solid parts; platforms to slide out and trapdoors to let down (on all of which defenders might stand to fire into the streets below) were contrived in various parts of the attic. Behind the new balustrade a patrol rampart was formed extending right round the walls and only interrupted by the higher building in the centre of the Threadneedle Street front. The contract drawings for the new attic, signed by William Cubitt and dated 14 July 1848, are at the Bank: they show that Cockerell was extremely economical in his use of material. Wherever possible the old stones were incorporated in the new work, being either just cleaned or recut as the case might be. Brickwork was used

predecessors having been destroyed in the Great Fire of 1666 and another conflagration in 1838. Cockerell was in competition with Sir William Tite for the new building, and the latter won. Another near neighbour of the Bank's, the London and Westminster Bank in Lothbury, was designed by Cockerell in conjunction



FIG. 33.—THE DIVIDEND PAY OFFICE

As rebuilt by Cockerell in 1835. It was remodelled by him in 1850 to its present form



FIG. 34.—THE SOUTH FRONT IN 1848

A drawing by T. S. Boys showing the original Soane attic immediately prior to its raising by Cockerell

wherever it would not be seen from the streets below. An interesting full-size drawing shows how the small cornice crowning the attic of Soane's centre in Threadneedle Street was reworked in position to a new profile, to form the bed mould for a larger crowning member which Cockerell placed above it. The anthemion blocks and the vases which had stood on the Soane blocking were reset for the most part on top of the new attic; four new vases were placed at the same time above the four centre columns of the Tivoli corner, but their addition was not quite happy as they obscured somewhat the straight attic behind them. In other respects, save for the introduction of iron spikes on the platform at podium level, the Tivoli corner was unaltered.

In 1842 the present wide space in front of the Bank in Threadneedle Street was created by the pulling down of Old Bank Buildings. In this year the foundation stone of the modern Royal Exchange was laid: its two

with Tite. The Sun Fire Office, erected on the site of St. Bartholomew, Exchange—a Wren-restored church which was pulled down in 1841—was also by Cockerell. It is interesting to note that this pioneer among insurance concerns was originally located in a court to the east of Sampson's Bank, and, being displaced by Taylor's eastern extensions, moved into Old Bank Buildings, from which it again migrated, upon the demolition of that structure, into its present home.

Cockerell retired from the position of Bank Architect in 1854. From that time to the present day the care of the building has been vested in many hands, and various minor alterations and additions may be attributed to them. In 1864 the craze for large sheets of plate-glass led to the windows of the rooms overlooking the Garden Court being denuded of their original small panes. Three years later the bones that still remained in this Court were removed and reburied in Nunhead Cemetery.

A gallery was added to the Rotunda in 1888, a proceeding which considerably destroyed the scale of the whole, and evoked at the time a spirited protest from Mr. Wyatt. Less than twenty years ago the south wall of the Bullion Yard was rebuilt some six feet in advance of its original line in order to give more space to the Gold-weighing Room. The new work has so toned in with the old that the alteration, without reference to the plans, would pass unnoticed.

The old cantilever gas-brackets which were fixed round the outer walls in the latter days of Soane have been recently removed: the use of gas at the Bank was eliminated at the beginning of the Great War owing to the possible danger of enemy bombs igniting the mains. Another war measure, the introduction of a bomb-proof mezzanine in the Pay Hall, has already been mentioned.

The internal colour schemes of the important rooms and corridors have been maintained in successive repaintings. Much of the furniture that Soane designed for the Governor's suite is still in use, as well as counters, cupboards and desks in the various offices and low, hooded chairs for the accommodation of the Bank's own night watchmen. The great increase in the activities of the Bank, with its management of the various loans

produced during the late war, found the existing premises unequal to the task of housing all the extra staff which were necessitated, and additional office space had to be secured outside, in many places in the City. This scattering of its forces has led the directors of the Bank to the realisation that full use was not being made of the magnificent three-acre site which belongs to them. They have decided that the whole of the interior shall be remodelled, with the addition of many more floors and a more clearly-defined allocation of departments. The process of rebuilding will scarcely affect the old outer walls: set back some fifty feet behind them the new structure will rise to a height of over 100 feet above the ground floor. Many of the existing halls and courts will disappear, but certain of them will be rebuilt in new positions; a large central court based on the present garden and placed on the main Threadneedle Street axis is a feature of the new plan, whilst the feeling of the great Soane halls will be carried practically right round the building between the old and new walls. It is hoped to make this—perhaps the final chapter in the history of the Bank's architectural development—a fitting conclusion to the initial work of Sampson and that of his successors, Taylor, Soane and Cockerell.



## Some Observations on Stone Decay

BY PROFESSOR A. P. LAURIE

No. IV

There are more causes of stone decay than the unfortunate selection of a bad building stone, though not nearly enough care is given to this important matter.

Throughout the North of England and Scotland reliable sandstones are available if proper care is taken in their selection.

Before selecting a stone it should be submitted to chemical analysis and chemical tests as well as observations of buildings for which it has been used.

Even a good general reputation is not sufficient without a special examination of the stone in the selected quarry and the different beds in the quarry itself. A good example of this variation of quality is to be found in that excellent building stone, the Millstone Grit. Many buildings exist in the north of great age built from this stone, which have stood well the test of time, and beside them modern buildings in which the stone is rapidly decaying.

The Millstone Grit is a disintegrated granite, river deposited. It contains quartz, felspar and mica. The quartz particles are often sharp and angular, which makes it a stone somewhat susceptible to wind weathering, its hard sharp particles forming a natural grinding material. The surface of a good Millstone Grit, when weathering normally, if examined through a lense is seen to consist of a mass of tiny quartz particles, touching at points, and with spaces between them, bedded in the magma behind.

But in two neighbouring quarries the Millstone Grit may be quite different in character. In the one, if it is a normal Millstone Grit, it will weather well; in the other it may contain a considerable percentage of calcium carbonate. This stone will rapidly decay, bringing out the original lines of its deposition.

An analysis of the Millstone Grit it is proposed to use is therefore essential.

The quarry having been selected, the different beds in the quarry should also be analysed to see that they are uniform in composition and the best bed selected.

Having decided on a suitable quarry, see that all the stone used comes from this quarry and no other is substituted. Too often if there is a shortage of delivery stone is obtained from a neighbouring quarry which is supposed to be just as good, and the unsightly result is a building with stones here and there badly decaying. Surely when good stone is available, such a spectacle should be regarded as equally discreditable to the architect as if part of the building fell down.

Owing to the tendency of the Millstone Grits to suffer from wind weathering the building should be designed to avoid swirls of wind, such as are formed

by buttresses, the prevailing direction of the wind noted, and screens of trees planted.

As the stone is also apt to be affected by damp, care should be taken to flash with lead, cornices and projecting portions. Buildings of Millstone Grit can be found where every detail of carving is absolutely sharp and every stone sound, except under the cornices and on roof stone balustrades, where the water is soaking in.

A little expenditure on sheet lead would have prevented this.

The mention of damp brings me to the second part of my discourse. Not nearly enough attention is paid to the geological features of a site before erecting an important building. The direction of dip of the underlying rock is of first rate importance.

Let us suppose, for instance, a building on gently sloping ground with higher ground behind it.

If the dip of the rock strata below the surface is in the opposite direction, there will be no natural underground drainage from the site, the water banking up against the strata. Indications of this condition are often revealed by the presence of springs. Under such conditions it may well happen that an actual water pressure is developed under the building swelling up asphalt floors. If the slope of the land is in the same direction as the dip, or along the edge of the strata at right angles to the dip, the underground drainage will be in the right direction. Examples can be found where the same building stone having been used, very old buildings built on ground sloping in the direction of the dip, or along the edge of the strata, are in excellent condition, while in modern buildings in which no such precautions have been taken decay has already set in. The soluble salts present in the sub-soil are also worthy of consideration. The presence of crystalline sulphates crystallising in the stone and breaking it up, are usually assumed to be due to the sulphur acids in the air, but there are cases where these soluble sulphates, such as sulphate of magnesia, are present in the sub-soil, and are being drawn up by capillary attraction into the stone.

If a bad site is inevitable, the first problem is the establishment of a scientific system of drainage before building upon it. Too much reliance is placed by the modern architect on damp courses. The older buildings have no damp courses, and the site had to be selected with care. Geology was an unknown science then, but the sites selected for many of our ancient buildings reveal a practical understanding of such matters.

While reliance is placed to-day on damp courses, not nearly enough care is devoted to their material and construction. Common pitch mixed with sand is sometimes used, and the work is often pierced or squeezed out in subsequent building operations. The selection of the material for and the laying of the damp course cannot be too carefully done, especially on a wet site. Too often the damp course is buried in earth and garden mould, thus rendering it useless; and it has not been unknown, where a concrete floor has been laid, to lay it well above the damp course, filling up with earth under the rubble. There is a great deal to be said for ventilated damp courses, and in this connection the interesting method adopted by Monsieur Knapen at Versailles is worthy of the serious attention of architects.

## Correspondence

### SCALE OF CHARGES.

1 Brick Court,  
Temple.  
August 1926.

To the Editor, JOURNAL R.I.B.A.,

SIR,—Further to the letter from "Experience" in the June JOURNAL and the several replies thereto, it may interest your readers to know of a case that recently came before Mr. Justice Talbot at Liverpool Assizes. An architect and surveyor sued his client for £162 10s., his fees for preparing plans and quantities. Mr. W. Proctor, for plaintiff, stated that the employer instructed the architect that the proposed house was not to cost more than £2,000, but he also gave special requirements involving refinement of detail and the best of everything throughout; one feature was raising the ground floor 4 feet to obtain a better prospect. After preparing sketches the architect informed the employer that the house would cost at least £2,400, and the employer, adding still further requirements, instructed tenders to be obtained; these varied from £3,340 to £4,747, and the client demurred, whereupon the details were varied to an amended tender of £2,698. The variations were so drastic that the employer abandoned the whole business and the architect claimed two-third of the usual fees.

Mr. J. Lynskey, for the defence, claimed that as the architect was not a member of the Royal Institute he was not entitled to payment on the scale approved for remuneration of members of that body, and further that the architect undertook that the house should not cost more than £2,400, therefore he had not carried out his instructions, and in law was not entitled to payment. He also claimed that the plans, etc., prepared were now useless to the employer.

His lordship, in giving judgment, said he was satisfied that the architect gave no guarantee as to the cost of the house and was entitled to payment for work performed. Judgment for plaintiff for £162 10s. and costs.

W. E. WATSON [F.],  
Hon. Secretary,  
Practice Standing Committee.

### R.I.B.A. ANNUAL DINNER 1926.

H.R.H. THE PRINCE OF WALES TO BE PRESENT.

Members of the Royal Institute will be gratified to learn that His Royal Highness The Prince of Wales (Hon. Fellow) has graciously consented to be present at the Annual Dinner of the Royal Institute of British Architects which will take place on Tuesday, 23 November, and to present the Royal Gold Medal for Architecture for the year 1926 to Professor Ragnar Ostberg.

Full particulars and application forms will be sent to all Members at an early date.

### ASHMOLEAN MUSEUM, OXFORD.

#### PROPOSED WINDOW TO WREN.

Most of our readers are aware that a very interesting exhibition of early astronomical and mathematical instruments was opened last year in the old building of the Ashmolean Museum, on the west side of the Sheldonian Theatre. The exhibition is in the charge of Dr. R. T. Gunther, and is on the first floor. On the staircase there are two small windows, one filled with unsightly glass, the other already converted into a memorial to Ashmole, who erected the building and is responsible for much of the collection. Dr. Gunther wishes to convert the other window in the same way, so as to form a local memorial to Wren, who designed the Sheldonian as well as the Ashmolean, and was himself an eager and talented astronomer and mathematician. It is with this object that a subscription list has been started, and it is hoped that the members of the Institute, which has already repaired an Ashmolean wall, will lend a helping hand by contributing to the memorial. As stated last month, the cost is estimated not to exceed £65. The following subscriptions have, so far, been received from members of the Institute:—R. Langton Cole, £1 1s.; T. Harold Hughes, £1 1s.

#### MR. H. GODFREY EVANS, B.A. CANTAB.

Mr. Godfrey Evans has resigned his position of Assistant Secretary of the R.I.B.A. in order to take a similar position in the Surveyors' Institution, and on 6 August, upon the invitation of the President, he met some of the members of the Council for a formal leave-taking. Mr. Dawber asked his acceptance of a cigarette case as a reminder of the time he had spent at Conduit Street, and expressed in the most cordial way the good will of all who knew his work there; it had been admirably done, and Mr. Evans was to be congratulated on the respect and esteem he had won, not only from his colleagues in the office, but from all who had met him. Others who spoke referred to Mr. Evans' unfailing courtesy and his willingness to help on all occasions. He had acquired very intimate knowledge of the work of the Institute, and not the least valuable of his qualifications was a retentive memory which enabled him to give Committees the benefit of his knowledge of detail with surprising accuracy. He will be missed by all, and he will have the happiness of knowing that he leaves us with the good will and good wishes of all.

A. K.



# Obituary

WALTER HENRY BRIERLEY [F.].

The death occurred suddenly at Hove on 22 August of Mr. Walter Henry Brierley, F.S.A., of York, one of the most distinguished architects of the North of England.

Born in 1862, Mr. Brierley obtained his architectural education as a pupil in the office of his father, and afterwards as an assistant in Warrington and Liverpool. In 1885, he entered into partnership with the late Mr. James Demaine, of York, who was then carrying on a very old-established practice, which can be traced back uninterruptedly to the renowned John Carr, one of the last of the brilliant band of architects who followed Inigo Jones and Wren in the development of our beautiful English Renaissance style.

Mr. Brierley, in 1918, took into partnership Mr. James Hervey Rutherford [F.], who had been associated with him for many years, and the business was then and is still carried on under the name of Brierley and Rutherford.

Mr. Brierley occupied the position of architect to the North Riding County Council from 1901 to 1923, and of Diocesan Surveyor for York from 1908 to 1921. He was one of the leading archæologists of Yorkshire, a prominent member of the Yorkshire Archæological Society and a Fellow of the Society of Antiquaries.

His architectural activities, although concentrated in Yorkshire, extended over a widespread area, and were occupied in buildings of very varied character. He was much engaged, like Carr, in the designing of large country houses. He remodelled and enlarged Acklam Hall, in the North Riding; Sledmere, for the late Sir Tatton and Mark Sykes; Hackness Hall, in the East Riding, for Lord Derwent; Sion Hill, near Thirsk, for Percy Stancliffe, Esq.; and Normanby Park, Lincolnshire, for Sir Berkeley Sheffield. Other country house work executed by him in Yorkshire, and of almost equal importance, is to be seen at Welburn and Thorpe Underwood Halls, Grimston Court, and Jervaulx Abbey, also in Lancashire at Hollins Hill, Accrington; while in the south of England are to be found two fine examples in Crundle Court, Dorset, and Ivories, at Cowfold, Sussex.

Equally noteworthy is Mr. Brierley's bank work, which can be seen in the premises he erected for the Midland Bank, at Doncaster, Sheffield, Sunderland, Darlington, Newcastle, Thirsk, and other Yorkshire towns. Special mention should be made of his extension of Beckett and Co.'s bank in York, and of the large new premises at Doncaster for the Westminster Bank (with which Messrs. Beckett's business is incorporated) and which he did not live to see completed. He also designed many large and important school buildings, among which the following may be cited as typical examples: Poppleton Road and Haxby Road Elementary Schools at York, the Girls' Secondary School in Queen Anne's Road, York, and the Northallerton Secondary School.

Reference must also be made to the large amount of ecclesiastical work which was executed from Mr. Brierley's designs, and which includes the following churches: St. Philip's, Buckingham Palace Road; St. Thomas's, Kensal Town; St. Peter's, Newton-le-Willows; St.

Luke's and St. Chad's, York; a War Memorial Chapel at Durham; a Girls' School Chapel at Huyton, Lancs, and smaller works at Rufforth, Goathland, and in other Yorkshire villages. He also carried out the restoration of the ancient churches of Sherburn and Foston, in Yorkshire, and also designed the whole of the oak fittings and organ case at the former church, as well as the chancel screens and other church finishings and furniture at Sledmere, Snainton, etc.

There is a wide gap between churches and racecourse buildings, but Mr. Brierley's experience shows how the abilities of a clever and resourceful architect can be utilised to advantage in works of this description. The extensive improvements which have been effected at York Race Course were carried out from his designs and under his supervision. He also prepared the scheme for the entire remodelling of the Rowley Mile Stands at Newmarket, which is now approaching completion, and designed new stands and other improvements at Lingfield and Gosforth Park. At Gosforth Park he incorporated in his design the fine old mansion built by Paine in 1755, retaining as much of the old work as possible, and where that was inconsistent with racing requirements, reproduced the characteristic features and peculiar "atmosphere" associated with it.

Only a small portion of Mr. Brierley's work has been mentioned, but the list is sufficiently inclusive to indicate the extent and versatility of his talents. His designs, whether conceived on mediæval or Renaissance lines, are marked by sincerity and truthfulness, sound constructional qualities, dignified restraint and an avoidance of over-elaboration. He insisted on the employment of the very best materials and workmanship that the means placed at his disposal allowed. He had a great admiration for the craftsmanship of the past, and skilfully employed and adapted old methods to suit the special character of his designs, directing the workmen and encouraging them to revive forgotten details of their craft. He was in the forefront with those who strive to uphold and elevate the standard of the aims and achievements of the art of architecture.

CHARLES EDWARD SAYER [*Associate*].

It is with great regret that we have to announce the death of Mr. Sayer, on 17 August at the age of seventy-two.

Mr. Sayer was elected an Associate in 1881. He was the Tite Prizeman in 1879 and gained the Institute Medal Prize in 1892 for his essay on "The Fireplace and its Accessories," which was published in the *Institute Transactions N.S.*, vol. 8.

Mr. Sayer was greatly interested in architectural literature, and for many years had enthusiastically identified himself with the work of the Literature Committee, of which he was vice-chairman at the time of his death. The loss of his sympathetic and scholarly collaboration, as well as his attractive and modest personality, will be greatly regretted by his old colleagues.

As an architect he was actively engaged in the improvement and additions to many country houses, and among the important houses which he designed were Fowey Hall, Cornwall (1900) and Helperby Hall, York (1915).

JOHN HENRY MAYBURY [*Licentiate*].

Mr. Maybury, who died on 14 July, aged 67, was the senior partner of the firm of J. H. Maybury and Son, Manchester. He was articled to the late E. J. Thompson of Manchester, and commenced practice on his own account in 1883. He was a Fellow of the Manchester Society of Architects from 1891 and became a Licentiate of the Royal Institute in 1911.

Mr. Maybury was for 8 years surveyor to the Levenshulme Local Board and was surveyor to the late Sir Henry Gore-Booth's Pendleton Estates. Among the many works he carried out were the Gorton Public Baths, schools at Levenshulme, factories for Messrs McIntyre, Hogg, Marsh and Co., Ltd., Anthony Burgon, Esq., W. H. Porter and Son, Ltd., Ald. Griffiths, and others, numerous warehouses, shops and offices in Manchester and Salford, and many private residences in Lancashire and Cheshire. He was also responsible for the development of a number of large building estates.

In 1919 he was joined in partnership by his son, Mr. Percy T. Maybury, who continues the practice.

For many years he was honorary secretary to the Stretford Division Conservative Association, and he took an active interest in many local institutions. He was Past Provincial Grand Deacon of the Order of Freemasons.

ARNOLD J. T. ELLISON [*Licentiate*].

Mr. Ellison died on 14 July. He was secretary and treasurer for the Preston Society of Architects, Surveyors and Civil Engineers. He enjoyed a large private practice and was interested in many works of architectural character. He was a Past Master of Unanimity Lodge 113, Preston, and Guild Lodge, West Lancashire. Although over age, he enlisted with the Forces, and throughout the whole of the war was on active service in France.

We have to announce with great regret the death of Mr. Somers Clarke, which took place towards the end of August at Mahamid, in Upper Egypt, at the age of 85, and of Mr. George Wittet [*F.*], at Bombay, to whose career reference will be made in the next issue of the JOURNAL.

## R.I.B.A. Probationers

Since August, 1925, the following have been registered as Probationers of the Royal Institute:—

ABBOTT: DEREK NEWLANDS, Milverston, Meads, Eastbourne.  
ADKINS: FREDERICK WILLIAM CHARLES, Delamere, Elm-woode Avenue, Harrow, Middlesex.  
AITKEN: FRANCIS KEITH, Leighton, Creigiau, near Cardiff.  
ALABASTER: JOHN RICHARD, 22 Arica Road, Brockley, S.E.  
ALEXANDER: RICHARD RENNIE, 38 Lilybank Place, Aberdeen.  
ALP: WILLIAM CHARLES, 1 St. Swithen's Street, Winchester.  
ANDERSON: JOSEPH WILSON, Myrtle Villa, Devonshire New Road, Blackpool, Lancs.  
ANDREW: JOHN SMITH, 19 Willow Grove, Marple, Cheshire.  
APPLETON: WILLIAM CHARLES, 17 Selwyn Street, Kirkdale, Liverpool.

ARMSTRONG: FREDERICK BERTRAM, 37 Adelaide Crescent, Hove, Sussex.  
AYLWIN: JOHN NORMAN, 20 Upper Lake, Battle, Sussex.  
BADCOCK: LEONARD ROY, 6 Pentillie Crescent, Ford Par Road, Mutley, Plymouth.  
BAIRD: GRAHAM SCOTT, Grahamston, Airdrie, Scotland.  
BARKER: HORACE MINNS, 117 Galton Road, Warley Wood, Birmingham.  
BARKER: KENNETH, Briarfield, Clifton Road, Heaton Moor, Stockport.  
BARNES: JOHN WILFRED HERBERT, 302 Millhouses Lane, Eccleshall, Sheffield.  
BARNES: VICTOR CHARLES, 67 Moss Road, Urmston, Manchester.  
BARROW: THOMAS JAMES DOUGLAS, 33 Tennyson Road, Bath, Somerset.  
BARTON: HARRY AUSTIN, 4 Ferndale Street, Cardiff.  
BATE: ERIC NORMAN, 7 Bingham Road, Bournemouth.  
BATHER: ERIC WALCOT, Great Ness House, Baschurch, Salop.  
BATTEN: LEONARD JOHN, 377 Sandycombe Road, Kew, Surrey.  
BEALE: EDWARD HAYLEY, Rockhurst, Burwash, Sussex.  
BEALE: RONALD ALBERT, 21 Eaton Street, Hanley, Stoke-on-Trent, Staffs.  
BEARD: PHILIP BERNARD, 19 Brookville, Hipperholme near Halifax, Yorks.  
BEATTIE: ISOBEL HOGG KERR, The Anchorage, Loch Ranza, Isle of Arran, N.B.  
BEATY-POWNALL: DAVID HERMAN, 61 Oakley Street, Chelsea.  
BECK: LANCELOT, 1 Queen Anne's Grove, Bedford Park, W.  
BEGG: KENNETH ANDREW, 94 Inverleith Place, Edinburgh.  
BELFORD: JAMES MACLEAN, Castle Vale, Pontefract, Yorks.  
BELOE: JOHN DOUGLAS, Bradfield College, Berkshire.  
BENNETT: HARRY, 2 St. Swithun's Terrace, Cannon Street, Winchester.  
BENTLEY: STUART, The Baths, Longton, Stoke-on-Trent.  
BERTRAM: STEPHEN NOEL, Winsley House, Stourwood, Bournemouth.  
BEVAN: HAROLD LACKLAND, Calder Cottage, Mossley Hill, Liverpool.  
BEVERIDGE: GILBERT ROBERT, 21 Nassington Road, Hampstead Heath, N.W.3.  
BILLIARDS: HAROLD, 33 Hartwell Place, Leeds.  
BIRKETT: ARNOLD LYNN, 23 Princes Avenue, Caerphilly, near Cardiff.  
BLACKETT: WINIFRED MAYNARD, Windyridge, Beacon Hill, Hindhead, Surrey.  
BLACKLOCKS: EDGAR, c/o 24 Newcombe Road, Earlsdon, Coventry, Warwickshire.  
BLACKSHAW: MAURICE BANTOCK, Lyndhurst, Hornsey Lane, Gardens, Highgate, N.6.  
BLUMBERG: JOSHUA ABRAHAM, Workers' Dwellings Branch, State Advances Corporation, Treasury Building, Brisbane, Australia.  
BOGER: ROBIN CECIL DUDLEY, Dial House, Park Street, Windsor.  
BOLOT: AARON, c/o R. Gailey, Courier Buildings, Brisbane, Australia.  
BOMER: EDWARD DIXON NEVILLE, Marsham Manor, Gerrard Cross, Bucks.  
BOMER: FREDERICK MELTON, Marsham Manor, Gerrard Cross, Bucks.  
BONSALL: RICHARD EMRYS, Dol-Blodau, Elm Tree Avenue, Aberystwyth.  
BOON: GEOFFREY MAURICE, Nashdom, Hope Road, Preswick, Manchester.



- BOORMAN : REGINALD ALFRED, 19 Avenue Road, Penge, S.E.20.  
 BOOTH : ROLFE GILBERT, Lakeswood, Town Court, Orpington, Kent.  
 BORLEY : GRENVILLE EDWARD NEWTON, 29 Portman Road, Boscombe, Bournemouth, Hants.  
 BOSTOCK : ROBERT, Sparsholt Manor, near Winchester.  
 BOWER : STEPHEN ERNEST DYKES, Elton House, Gloucester.  
 BOWKER : RICHARD ENOCH, 102 Lightwoods Road, Bearwood, Smethwick.  
 BRADDOCK : HENRY, 45 Dennis Park Crescent, Wimbledon, S.W.20.  
 BRADFORD : WILLIAM NORRIS, 2 Royal Albert Cottages, Ashton Road, Lancaster.  
 BRADSHAW : DONALD, 11 Island Road, Garston, Liverpool.  
 BREND : HORACE JAMES, Clifton, Tyrone Road, Thorpe Bay, Essex.  
 BRIMSON : STANLEY WILLIAM, 117 Bravington Road, Paddington, W.9.  
 BROADBENT : GEORGE HENRY, Juneau Villa, Liverpool Road Penwortham, Preston, Lancs.  
 BROUGHTON : FRANK HOLDEN, 21 Ulleswater Street, Bolton, Lancs.  
 BROWN : ALAN, Cumdiovock House, Dalston, Carlisle.  
 BROWN : AUSTEN KIRKUP, 2 Ashbrooke Mount, Sunderland.  
 BROWN : FRANK BOWEN REYNOLDS, 35 Bedford Square, W.C.1.  
 BROWN : LAWRENCE ARTHUR, 61 Little Cadogan Place, S.W.  
 BROWN : LEONARD LONGMAID, 9 Tavistock Square, W.C.1.  
 BRUCE : WILLIAM GEORGE HAY BLACK, 61 Watson Street, Aberdeen.  
 BRYCE : HELEN MARY, Farmfield, Penicuik, Midlothian.  
 BRYCE : WILLIAM THEODORE, Farmfield, Penicuik, Midlothian.  
 BUCKLAND : FRANCIS JOHN, 34 Bedford Square, W.C.1.  
 BUDGEN : PERCY GRAHAM, White Lodge, Rumney, near Cardiff.  
 BULMER : ARTHUR HERBERT, 1 Grand Parade, Portsmouth, Hants.  
 BUNCE : LESLIE WILLIAM JOSEPH, Eel Moor, Swanmore Road, Boscombe East, Bournemouth, Hants.  
 BUNGEY : CHARLES WILLIAM, The Square, Titchfield, near Fareham.  
 BUNYAN : JAMES, 42 Highfield Drive, Kelvindale, Glasgow.  
 BURKE : ARTHUR FREDERICK, 236 Bermondsey Street, S.E.1.  
 BURROWS : ANDREW CHARLES, Lochgain, Meliden Road, Prestatyn.  
 BUTCHER : GORDON WILLIAM, 56 Surbiton Road, Southend-on-Sea.  
 BUTLER : RONALD MCCONNELL, Redclyffe, Melbourne Road, Halesowen, near Birmingham.  
 CALLOW : ALBERT LESLIE, 237 High Street, West Bromwich.  
 CARR : DAVID, The Elms, Castle Terrace, Berwick.  
 CARTER : EDWARD JULIAN, Cavendish Club, Piccadilly, W.1.  
 CARTER : FRANK RANDLE, c/o The Architectural Association, 34-36 Bedford Square, W.C.1.  
 CHALLEN : MARGARET CLARE, Hussley, Barnt Green, near Birmingham.  
 CHALLIS : FREDERICK EDWARD SEWELL, 35 Howitt Road, Hampstead, N.W.3.  
 CHAMBERS : ERNEST JAMES, 28 Lady Bay Road, West Bridgford, Notts.  
 CHAPLIN : JOHN PERCIVAL, 22 Weaponners Valley, Scarborough.  
 CHEESMAN : KENNETH, 151 Palmerston Road, London, N.22.  
 CHILTON : EDWIN RAYMOND, 7 Langholm Crescent, Darlington.  
 CHOATE : KENNETH HAIGH, Epworth House, Summerseat, Manchester.  
 CHURCH : ALFRED GEORGE, 115 Bonner Hill Road, Kingston-on-Thames, Surrey.  
 CLARK : HERBERT ANTHONY, 42 Old Gloucester Street, Southampton Row, W.C.1.  
 CLARKE : ERIC, Calcie Cot, Northway, Neasden, N.W.10.  
 CLARKE : JOHN WESLEY, Pond House, Hayle, Cornwall.  
 CLAYTON : WILLIAM POTTER, South View, Hapton, near Burnley, Lancs.  
 COCHRANE : JOSEPH BRIAN, Chestnut House, Albrighton, near Wolverhampton.  
 COCKERHAM : LESLIE, Forest Lodge, Crow Hill Drive, Mansfield, Notts.  
 COCKETT : HARRY, Bridge House Hotel, Catterick Bridge, Yorks.  
 COE : NORMAN RICHARD, 16 Royal Avenue, Old Trafford, Manchester.  
 COLEMAN : JOHN JAMES, 68 Herrington Street, Sunderland, Co. Durham.  
 COLES : FRANK AUSTIN, Long Buckby, near Rugby.  
 COLLIER : EDWIN WALTER, 7 Edith Road, Wimbledon, S.W.19.  
 COMBER : EILEEN ELEANOR, 43 Frances Road, Windsor.  
 CONWAY : JAMES SIMPSON, 5 Golden Square, Aberdeen.  
 COOMBS : FRANK MUNDY, Chewton House, Frome Hill, Radstock, Somerset.  
 CORDINER : THOMAS SMITH, 26 Midlothian Drive, Shawlands, Glasgow.  
 CORNWELL : ERIC REGINALD GERALD, c/o Heazell Sons & Knight, Burton Buildings, Parliament Street, Nottingham.  
 COSENS : DORIS MORLEY, 13 Millington Road, Cambridge.  
 COSH : JAMES AUBREY, National Bank of Australasia, Australia House, W.C.2.  
 COUCH : ALFRED CLIVE, Court Oak House, Court Oak Road, Harborne, Birmingham.  
 COULDREY : STUART MILL, Redrock, Paignton, Devonshire.  
 COWELL : ERNEST, 57 Island Road, Garston, Liverpool.  
 CRABTREE : WILLIAM, 40 Windsor Road, Doncaster, Yorks.  
 CRASKE : CHARLES WALTER, 2 Saxon Street, Cambridge.  
 CRAWFORD : DOUGLAS LINDESAY, Luanza, Tower Drive, Gourack, N.B.  
 CRICKMAY : COLIN ROSSER, 16 Park Road, Redhill, Surrey.  
 CROSBY : EDMUND LIONEL, 11 Hillfield Avenue, Wembley, Middlesex.  
 CROSSLEY : HERBERT ALLAN, 25 Oakley Crescent, Chelsea S.W.3.  
 CUMINE : ERIC BYRON, 11 Belsize Avenue, N.W.3.  
 CUMMINGS : ROBERT PERCY, c/o The Architectural Association, 34 Bedford Square, W.C.1.  
 CUNLIFFE : EDWARD JOHN, 59 East Road, Longsight, Manchester.  
 CUNNINGHAM : JOHN COLVILLE, 122 George Street, Edinburgh.  
 CURTIS : NORMAN WILLIAM, 74 Bournemouth Park Road, Southend-on-Sea.  
 CURTIS : WILFRID RUPERT HARPER, 52 Ravencroft Avenue, Golders Green, N.W.11.  
 DACOMBE : HENRY JOHN, Robinwood, Rovine Road, Boscombe, Bournemouth.  
 DANIEL : TREVOR MERVYN, Sunny Bank, Abersychan, Mon.  
 DARK : ARTHUR JAMES, 54 Hornsey Rise, N.19.  
 DAVEY : GEORGE, 60 Shaftesbury Street, Alloa, N.B.  
 DAVIES : ELIDIR LESLIE WISH, Hollymead, Mile End, Colchester.  
 DAVIES : NORMAN TALBOT, Ranmore, High Street, Ewell, Surrey.  
 DAVISON : NORMAN FRANCIS, 25 High Street, Redcar, Yorkshire.  
 DAWBARN : CHRISTOPHER YELVERTON, 12 Adelaide Terrace, Waterloo, near Liverpool.  
 DAWES : STANLEY, 2 New Street Square, Glamorgan.  
 DAWES : MAURICE HARRY EDWARD, 1 Bridge Cottages, Plympton, S. Devon.  
 DENNING : GEORGE ERNEST WALTER, 30 Edith Avenue, Plymouth.  
 DE QUINCEY : MARGARET ANNE, Montrose, Worplesdon Hill, near Woking, Surrey.

- DEUCHARS : JAMES, Camperdown Gardens, Dundee.  
 DICKINSON : GILBERT, 36 Woodend Terrace, Soothill, Batley, Yorks.  
 DOW : JOHN SIM, Dunolly, Young Street, Craigie, Perth.  
 DRAYTEY : ARTHUR WESTLEY, 62 Ombersley Road, Moseley, Birmingham.  
 DRUMMOND : JAMES, Lynwood, Kinghorn, Fife.  
 DRURY : HENRY MYLES REILLY, 28 Downshire Hill, Hampstead, N.W.3.  
 DUMVILLE : MAURICE ROLAND, 12 Ingram Road, East Finchley, N.2.  
 DUNHAM : HEDLEY THEODORE, Graycott, 178 Hall Road, Norwich, Norfolk.  
 DUNPHY : NORAH, Donnybrook, Llandudno.  
 DURELL : HARRY, 10 Hammersmith Terrace, W.6.  
 DURNIN : LEO, 66 Blenheim Place, Aberdeen.  
 DYER : HAROLD THORNLEY, Melrose, Truro Road, St. Austell, Cornwall.  
 DYSON : ARTHUR LEWIS, 35 Rawthorpe Lane, Dalton, Huddersfield.  
 EADES : HUGH REGINALD HARRY, Beech Barn, Boxgrove Road, Guildford.  
 EAGLESFIELD : THOMAS LAIDLAW, 3 Gordon Street, Workington, Cumberland.  
 EARLE : ROBERT NORWOOD, 2 Warner Road, W.8.  
 EASTON : HUGH, 42 Hyde Park Square, W.2.  
 ECKTON : GEORGE BISHOP, Stoneleigh, New Arterial Road, Pleckgate, Blackburn.  
 EDGAR : NORMAN, 43 Polmaire Street, Blaydon-on-Tyne.  
 EDMED : FREDERICK PERCY, 15 Ivor Terrace, Westgate-on-Sea, Kent.  
 EDWARDS : REGINALD VICTOR, c/o W. H. Colt, Ltd., Bethersden, Kent.  
 EDWARDS : SIDNEY ROY, 11 Bickham Park Road, Peverell, Plymouth, Devon.  
 ELDER : ROBERT WALTER, Castewood, Greenock Avenue, Cathcart, Glasgow.  
 ELGAR : SIDNEY, Woodgrange Cottage, Hornham Hill, Salisbury.  
 ELLERTON : EDMUND MOUAT-KEITH, 50 Burford Gardens, Palmers Green, N.13.  
 ELLIS : MARY FEODORE RUTH, 44 Clarendon Road, W.11.  
 EMERY : SYDNEY GEORGE, Chalford, Gloucestershire.  
 ERITH : RAYMOND CHARLES, 46 Albion Road, Sutton, Surrey.  
 EVANS : CLIFFORD REA, 16 Friar Street, Reading.  
 EVANS : GWILYM CARADOC, 1 Colliery Road, Rhosddu, Wrexham.  
 EVEREST : ARTHUR LESLIE, 21 Dungarvan Avenue, Putney, S.W.15.  
 FAIRLESS : CHARLES LATHAM, The White House, Promenade, Llandudno, N. Wales.  
 FAIRWEATHER : JAMES McDONALD, 73 Benjamin Road, Wrexham, N. Wales.  
 FANCOTT : WILLIAM EDMUND, 26 Sparkenhoe Street, Leicester.  
 FARMER : LESLIE CHARLES SOLOMON, 97 Bollo Bridge Road, Acton, W.3.  
 FATHERS : THOMAS EDWIN, Northleigh, near Witney, Oxon.  
 FEDESKI : HENRY, 220 Park Lane, Aston, Birmingham.  
 FENNAMORE : JOHN EDWIN, 7 De la Hay Avenue, Plymouth.  
 FERNIE : CYRIL, Weatheroak, 119 Taylor Road, King's Heath, Birmingham.  
 FEWSTER : LIONEL HUGO, Beech Holme, Heworth-on-Tyne, Co. Durham.  
 FIELD : CECIL WILLIAM, 12 Waterford Road, Fulham, S.W.6.  
 FIELKER : NATHAN, 14 Bullen House, Collingwood Street, Bethnal Green, E.2.  
 FIRTH : THOMAS FREDERICK, 15 St. Michael's Square, Chapel-town Road, Leeds.  
 FISHER : BARBARA SYBIL HOLT, 16 Grove End Road, N.W.8.  
 FISHER : FREDERICK REGINALD, 64 Beckwith Road, Herne Hill, S.E.24.  
 FISHER : WALTER ROBERT FITZGIBBON, 16 Grove End Road, N.W.8.  
 FLEETWOOD-HESKETH : CHARLES PETER FLEETWOOD, 1 Wyndham Place, W.1.  
 FLETCHER : FRANCIS JOHN, Sheepsbridge Lane, Mansfield Notts.  
 FOGDEN : JOSEPH, 33 Vernon Road, Leeds.  
 FOLKES : JOHN HOMERY, Hagley Grange, near Stourbridge Worcester.  
 FORBES : HECTOR JOHN, 37A Clarence Parade, Southsea Hants.  
 FORD : RICHARD AILWYN LAVINGTON, Rusdon Cottage, Bloomfield Road, Bath.  
 FOSTER : GEOFFREY ALLBERG, 77 Addison Road, Hove, Sussex.  
 FOX : CYRIL FREDERICK, Charnwood, Kingsbury Avenue, St. Albans.  
 FOX : KEITH STEPHEN, 19 Brunswick Gardens, W.8.  
 FRANCIS : REGINALD HENRY, 28 Ker Street, Devonport, Plymouth.  
 FRANCIS : RONALD EDWIN, The Kiln, Box-End, Kempton Beds.  
 FRAZER : WILLIAM BURDON, Woodside, Lindisfarne Road, Newcastle-on-Tyne.  
 FRITH : ALFRED GERALD PETTER, York Cottage, Yeovil Somerset.  
 FRY : CYRIL HAROLD, Montem Villa, 239 Burrage Road, Plumstead, S.E.18.  
 FURBUR : ERIC RONALD, Overdale, Willaston, near Birkenhead.  
 GARRATT : ELLA MARY, 71 Holyhead Road, Handsworth Birmingham.  
 GERRARD : PHILLIP, 21 Leonard Avenue, Sherwood, Nottingham.  
 GIBBS : WILLIAM DOWNES, 38 Aegis Buildings, Lovedale Street, Johannesburg, Transvaal, South Africa.  
 GILBERT : LEONARD SHALCROSS, 307 Markhouse Road, Leyton.  
 GILL : ALEXANDER, 75 Duff Street, Macduff, Banffshire, Scotland.  
 GILLIES : WILLIAM HENRY, Department of Public Works, Brisbane, Australia.  
 GILROY : RICHARD, 29 Broadway, Maidenhead.  
 GINGELL : CLIFFORD, 54 Hendrecapn Road, Penycraig, S. Wales.  
 GLADWIN : THOMAS ROBERT, Hayward Street, Brisbane, Australia.  
 GLEAVE : JOSEPH LEA, 36 Church Street, Bradford, Manchester.  
 GOLDSMITH : EDWARD FELIX, 11B Bishopswood Road, Hampstead Lane, N.6.  
 GOLDSMITH : HUMPHREY HUGH, 11B Bishopswood Road, Hampstead Lane, N.6.  
 GORDON : ERIC, 47 Gorton Street, Peel Green, Manchester.  
 GOULD : JOHN, Lyndystra, Barr Wood Road, Bramhall, Cheshire.  
 GRAHAME : ALISTER MALISE, 4 Etrick Road, Edinburgh.  
 GRAY : CHARLES WILLIAM, 93 Comely Bank Avenue, Edinburgh.  
 GRAY : JAMES TAYLOR, 245 Saracen Street, Possilpark, Glasgow.  
 GREEN : CHRISTOPHER, 83 Gunterstone Road, W.14.  
 GREENAWAY : GEORGE FRANCIS, 34 Lancaster Road, Eccle Old Road, Pendleton, Manchester.  
 GREY : JOHN, The White House, Cobham, Surrey.  
 GROVE : EDWARD ATKINS, King's Road, Fareham, Hants.  
 HAIGH : JOSEPH EDMUND, Panville Maltham, near Huddersfield, Yorks.  
 HALE : ALFRED ROBERT, 26 Murray Road, S. Ealing, W.5.  
 HAMILTON : JOHN VISICK, The Vicarage, Windsor.



- HANNAM : FRANCIS LAMBSON, 60 Queen's Road, Wimbledon, S.W.19.
- HANSTEIN : SIMON MICHAEL, 77 Clark Street, Stepney, E.1.
- HARDCASTLE : ALBERT JOHN, Arretton Farm, Bashley, New Milton, Hants.
- HARDIE : DAVID GARDINER, Cockpen Manse, Bonnyrigg, Midlothian, Scotland.
- HARDING : DOUGLAS EDISON, 106 London Road North, Lowestoft.
- HARRIS : LEONARD DAVID, 128 King Henry's Road, N.W.3.
- HARRIS : SIDNEY WESLEY, 63 Kyrle Road, S.W.11.
- HARRISON : FRANCIS PETROC, St. Benet's, Wellington Terrace, Clevedon, Somerset.
- HARRISON : FRANK PODESTRA, 40 Mount Gold Road, Plymouth.
- HARVEY : MURIEL, St. Margarets, Cedar Avenue, E. Barnet, Herts.
- HASSELL : GORDON FREDERICK, 73 Stanley Road, Hounslow, Middlesex.
- HATTON : BRYAN EWART, Brydon, St. Bernard's Road, Olton, Warwickshire.
- HAWKARD : CYRIL, 110 Spotland Road, Rochdale.
- HAWKINS : HUBERT OSWALD, c/o Newborn & Smith, 6 New Square, Lincoln's Inn, W.C.2.
- HAWSON : HUGH, Spean Cottage, Davidson's Mains, Midlothian.
- HENDERSON : PERCY PITHIE, 16 Thirlestane Lane, Edinburgh.
- HENNIKER : RICHARD FREDERICK, Carlinwark, Middleton Road, Camberley, Surrey.
- HENRY : JOHN VANSTONE, 220 Eastfield Road, Peterborough.
- HEPWORTH : HENRY FRED, 2 Livingstone Road, Blackpool, Lancs.
- HERSCH : ROBERT JOSEPH, Hillel House, Glebe Road, Cambridge.
- HEYWOOD : THOMAS, Ball Hill, Shawclough, Rochdale.
- HILLIER : NORMAN BASIL, Bethune, Sheringham Road, Anerley, S.E.20.
- HODGESS : IVAN SYDNEY, Rostrevor, Mannamead, Plymouth.
- HODGKINSON : WILLIAM, 2 Silver Hill Road, Derby.
- HODGSON : EDWARD, 36 Granville Road, Middlesbrough.
- HODSON : MARY AGNES MARGARET, Sandcliff, Reigate.
- HOLDER : HERBERT WILLIAM, 51 Southcote Road, Bourne-mouth, Hants.
- HOLE : RICHARD FLETCHER, 88 Mill Street, Bradford, Manchester.
- HOLLELY : ARNOLD EWART, Wayside, Sparken Hill, Worksop, Notts.
- HOLROYD : KENNETH DE COURCY, Bocket, Maidenhead.
- HOPKINS : GEORGE, Lyndhurst, Rhosse, Cardiff, Glam.
- HOWARD : FRANCIS AYLMER, Gravel Hill, Boxmoor, Herts.
- HOWARD : WILLIAM FREDERICK, 113 Durants Road, Ponders End, Middlesex.
- HOWKINS : ERNEST GEORGE, 54 Highwoods Road, Mextborough, near Rotherham.
- HUDDY : GEORGE VERNON, Greenwich House, Boscawen Street, Truro, Cornwall.
- HUDSON : KEITH BISHOP, 115 North Coronado Street, Los Angeles, California, U.S.A.
- HUMPHREY : WILLIAM EDWARD, 90 Curzon Street, Long Eaton, Derbyshire.
- HUTBER : FREDERICK HUBERT, 345 Wharncliffe Gardens, St. John's Wood, N.W.8.
- HUTCHINSON : BENJAMIN MARTIN, Merrion, Gloucester Road, Kingston Hill, Surrey.
- INGLIS : FRANK ALEXANDER GREIG, 286 Great Western Road, Aberdeen.
- JACKSON : HERBERT, 14 Anne Road, Handsworth, Birmingham.
- JAMIESON : GEORGE LINDSAY AULDJO, Prestonfield, Edinburgh.
- JEFFREY : JOHN, 79 Maxwellton Road, Paisley, Scotland.
- JERDEN-COOK : ELLIS, 7 Richmond Street, Southend-on-Sea, Essex.
- JOHNSON : CHRISTOPHER, Weardale House, Sydenham Road, West Hartlepool.
- JOLLY : GEORGE JAMES, 35 Arabin Road, Brockley, S.E.4.
- JONES : CHESTER HENRY, Tai Yuan, Loom Lane, Radlett, Herts.
- JONES : JOSEPH GLYNNE, The Cottage, Llanengan, Abersoch, Carnarvonshire.
- JONES : WILLIAM RICHARD, 11 Merton Grove, Bootle, near Liverpool, Lancs.
- JOY : DOUGLAS BLAKE, Briarwood, Kelston Road, Whitchurch, near Cardiff.
- KELHAM : HARRY WILKINSON, 28 Golders Green Crescent, N.W.11.
- KELLY : GEORGE FREDERICK, Bettwood Dalling, Chorleywood Road, Rickmansworth, Herts.
- KENDALL : HENRY, 32 St. Stephens Gardens, St. Margarets-on-Thames.
- KENNEDY : ROBERT TERENCE, 34 Chapel Road, Northenden, Cheshire.
- KERRISON : WALTER JAMES ERNEST, Bunya Street, Eagle Farm, Brisbane, Queensland, Australia.
- KILPIN : RICHARD MEDCALF, 21 Lovaine Avenue, Monkseaton, Northumberland.
- KING : JOHN THOMSON, Rokeby, Titwood Road, Maxwell Park, Glasgow.
- KING : LAURENCE EDWARD, The Wayside, Shenfield Common, Brentwood, Essex.
- KING : SYDNEY CUTHBERT, 75 Kirkley Park Road, Lowestoft, Suffolk.
- KING : WILLIAM HENRY, 4 Heasle Mount, Hyde Park, Leeds.
- KINGHAM : HENRY, 41 Albion Street, Wallasey, Cheshire.
- KINGSFORD : GEOFFREY MONTAGUE, Birken Trees, Kingswood, Tadworth, Surrey.
- KINNIMOUTH : WILLIAM HARDIE, 68 Marchmont Crescent, Edinburgh.
- KIRBY : BRIAN FRANK, 28 Gloucester Road, Dartford, Kent.
- KNIGHT : THOMAS WILLIAM, 16 Tweenbrook Avenue, Gloucester.
- LACK : KENNETH RIVERS, 56 Frederick Street, Loughborough.
- LACOSTE : GERALD AUGUSTE CHARLES, 19 Upperton Gardens, Eastbourne.
- LAMB : ANDREW JOHN, Rostherne, Corbridge-on-Tyne, Northumberland.
- LAMB : WILLIAM, Kaduna, Deneside Road, Darlington.
- LANG : REGINALD BERNARD, 321 Dickenson Road, Longsight, Manchester.
- LASKIE : JOHN GAIRNS, Roselynn, Bearsden, near Glasgow.
- LEE : JOSEPH WILLIAM, Seville House, Rotherham Road, Hemsworth, near Pontefract.
- LEE : WALTER JOHN, 182 Howard Road, Barking, Essex.
- LEVER : WILFRED SHARPLES, Hylands, Mottram Old Road, Gee Cross, near Hyde, Cheshire.
- LEWIS : ALFRED JOHN WYCLIFFE, 2 Rosehurst Villas, Woodlands Road, Tunbridge Wells, Kent.
- LEWIS : GILBERT NORMAN, Balvenie, Orchard Road, Sundridge Park, Bromley, Kent.
- LEWIS : WALTER, 15, Chermide Road, Aigburth, Liverpool.
- LIMMER : ALLAN WILLIAM, Holly Spring Cottage, Bracknell, Berks.
- LINDFIELD : GUY REGINALD, Bellcumba Lodge, St. Winefride's Road, Littlehampton, Sussex.
- LINDSAY : IAN GORDON, 22 Rothesay Terrace, Edinburgh.
- LITTLE : RICHARD, Station House, South Gosforth, Northumberland.
- LLEWELLYN : GLYN PRICE, Bryn-Awel, Cymmer, Porth, Glamorgan, S. Wales.
- LLOYD : JOHN TREVOR, 77 Valetta Road, Acton, W.3.

- LODGE: HERBERT, 9 Malpas Street, off Shaw Street, Oldham.  
 LONGLAND: ARCHIBALD TATHAM, 29 St. Peter's Square, Stamford Brook.  
 LORIMER: ALLAN GORDON, c/o Houston, 20 Cross Road, Meckleriggs, Paisley.  
 LOWE: HAROLD DOUGLAS, Kashmir, Milton Grove, Wigan.  
 LOWE: WILLIAM LOUIS, 110 Zetland Street, Southport, Lancs.  
 LOWES: WALTER EDWARD, The Homes, Hextable, Swanley, Kent.  
 LOWRY: LESLIE, Marlborough House, Ryhope, Co. Durham.  
 LUMB: HARRY, Ingwood, West Vale, near Halifax, Yorks.  
 LUXTON: EDWARD JOHN, Coastguard Station, Kessingland, near Lowestoft.  
 MACDONALD: ALFRED IAN DUNCAN, Roseneath, Troon, N.B.  
 MACDONALD: JOHN, 6 Allan Drive, High Possil, Glasgow.  
 MACMANUS: FREDERICK EDWARD BRADSHAW, 39 Rotherwick Road, N.W.11.  
 MACGREGOR: JOHN WISHART, 55 Belgrave Road, S.W.1.  
 MACKENZIE: ALAN, c/o A. Marshall Mackenzie, 173A Union Street, Aberdeen.  
 MACKINTOSH: DOUGLAS MALCOLM, Holly Lodge, Froxfield Green, Petersfield, Hants.  
 MACKINTOSH: GORDON NASMYTH, 29 Lauriston Gardens, Edinburgh.  
 MADDICK: WILLIAM THOMAS, 2 Church Street, Kingsbridge, South Devon.  
 MAITLAND: JAMES, 18 King Street, Paisley, Scotland.  
 MANNING: ROGER DAVYS, 41 St. George's Square, S.W.1.  
 MARSDEN: WILLIAM, The Billiard Hall, Fleetwood Road, Thornton-le-Fylde.  
 MARSTON: WINSTON EWART, 58 Vaughan Street, Coalville, near Leicester.  
 MARTIN: HAROLD, 15 Cavendish Street, Sheffield.  
 MARTIN-SMITH: DONALD FRANK, The Briars, Arkley, Barnet.  
 MASSIE: DAVID MEARN, 11 Cleveleys Grove, Higher Broughton, Manchester.  
 MATTHEW: ROBERT HOGG, 43 Minto Street, Edinburgh.  
 MAYBURY: MATTHEW, 64 Albion Road, Dalston, E.8.  
 MAYMAN: LESLIE GILPIN, 129 Newland Avenue, Hull, Yorks.  
 McCONNEL: KENNETH HAMLYN, 34 Sydney Street, Chelsea, S.W.3.  
 McEWAN: MARGARET JEAN, 19 Elgin Terrace, Dowanhill, Glasgow, W.1.  
 McINTYRE: DONALD, Tarfside, West Villas, Stockton-on-Tees.  
 MEAD: ROBERT CHARLES, Gunville House, East Coker, Yeovil, Somerset.  
 MEED: HUBERT LESLIE, 9 Reigate Road, Seven Kings, Essex.  
 MELLOR: FRANK, Bankfield Road, Armitage Bridge, Huddersfield.  
 MICKLETHWAITE: DANIEL MARRIOTT, 3 Staverton Road, Oxford.  
 MILLINGTON: ARTHUR HENRY, Dalkeith, 1 Talbot Road, Wembley, Middlesex.  
 MILLS: CYRIL ROSS BESFOR, Leighton House, Park Road, Cromer.  
 MIRAMS: DENNIS GEORGE, University College, Gower Street, W.C.1.  
 MOFFATT: JOHN BURN, 120 Main Street, Spittal, Berwick-on-Tweed.  
 MOLLISON: WILLIAM, 258 Blackness Road, Dundee, Scotland.  
 MOORE: ERNEST CLIFFORD, 20 West Avenue, Leicester.  
 MOORE: RESTA WILLIAM, Stirling, 16 Amherst Road, Bexhill.  
 MORRIS: ALEXANDER GEORGE, 20 Heath Hurst Road, Hampstead, N.W.3.  
 MORRIS: RONALD STANLEY, 34 Knightland Road, Upper Clapton, E.5.  
 MORRIS: TREVOR, 162 Rhys Street, Tredlaw, Rhondda, South Wales.  
 MORRISON: ALEXANDER JAMES WILSON, 40 Drummond Place, Edinburgh.  
 MORRISON: JAMES, 23 Holborn Road, Aberdeen, Scotland.  
 MOSELY: EDNA, 10 Cavendish Road, St. John's Wood, N.W.8.  
 MOUNTFORD: PHILIP GEORGE, 25 Richmond Wood Road, Bournemouth.  
 MOWBRAY: JOHN GRAEME, Oceania Terrace, Manly, Brisbane, Australia.  
 MUIR: HAROLD JOHN, 20 Montgomery Street, Edinburgh.  
 MURRAY: ERIC, 20 Karslake Road, Wavertree, Liverpool.  
 MURRAY: JAMES MACKIE, 5 Dick Place, Edinburgh.  
 NAISH: JOHN SIDNEY, Grey Gables, Norfolk Road, Bury St Edmunds.  
 NASH: EDWARD TINDAL ELWIN, 16 Woodstock Road, Bedford Park, W.4.  
 NASH: VIVIAN LESLIE, 7 Duncan Terrace, N.1.  
 NEIL: CHARLES ARTHUR WELLS, Aorangi, 53 Chalkwell Gardens, Leigh-on-Sea, Essex.  
 NEWMAN: ARTHUR RICHARD POINTING, Laburnum House, Ram Hill, Coalpit Heath, near Bristol.  
 NEWNHAM: HOWARD, 155 Mason's Hill, Bromley, Kent.  
 NICOLLS: GUSTAVUS FLITCROFT, Fir View, Culverden Park Road, Tunbridge Wells.  
 NICOLSON: MALCOLM, c/o J. Jordans, Esq., 12 Castle Street, Edinburgh.  
 NOAD: RICHARD MERVYN, The Den, Perth, Scotland.  
 NORTH: EDWIN SAMUEL LITHGOW, Arosa, Amersham Hill, High Wycombe.  
 OAKES: COLIN SINCLAIR RYCROFT, 28 Surrey Road, Harrow, Middlesex.  
 ORMROD: FRANCIS JAMES MASSEY, 16 Beech Grove, Hooton, Chester.  
 PALFREY: ARTHUR, 26 Commins Road, Polsloe Park, Exeter.  
 PALMER: ELIAS WILLIAM, 56 Fore Street, Upper Edmonton, N.18.  
 PARELKAR: SHANKERRAS HARRISCHANDRA, 1312 Parel Village, near Government House, Parel, Bombay, India.  
 PARKER: FRANCIS WILLIAM CYRIL, 30 Southgate Street, Bath, Somerset.  
 PARKER: HEDLEY, 22 Addington Mansions, Highbury.  
 PARSONS: LESLIE HARRY, Waverley Hotel, Horsham, Sussex.  
 PATERSON: LENNOX DUNDAS, Lochside House, Hamilton, Lanarkshire.  
 PAYNE: ROBERT WILLIAM, 154 Friar Street, Reading.  
 PAYNE: WILLIAM ARTHUR, 16 Great Cumberland Mews, Seymour Place, W.1.  
 PEARSON: CHARLES EDWARDS, 18 Dalton Square, Lancaster.  
 PEARSON: RALPH HENRY, 143 Park Avenue, Northfleet, Kent.  
 PENN: WILLIAM HENRY MILNER, The Whym, Bosham, near Chichester, Sussex.  
 PESKETT: HARRY MICHAEL, 2 Ranelagh Road, Redhill, Surrey.  
 PETERS: HENRY ALBAN, 8 Union Road, Pennsylvania, Exeter.  
 PHILLIPS: HOWARD STANLEY, 1 Lowe Street, Wolverhampton.  
 PHILLIPS: ROY LOVELL, 15 Routh Road, S.W.18.  
 PICKFORD: ALFRED, 55 Brighton Road, Birkdale, Southport.  
 PLAYNE: EDWARD, Bancrofts, Woodford Green, Essex.  
 PLEWS: CLIFFORD EDWARD, Pilmoor Cottage, Richmond, Yorks.  
 POLLEX: GUSTAVE ERIC, 49 Wendell Road, Shepherd's Bush, W.12.  
 POLTOCK: JOHN WILLEY, 241 Byron Road, Wealdstone, Middlesex.



- POTTS: WILLIAM NEWBY, 128 Villiers Road, Willesden Green, N.W.10.
- PRATT: ARTHUR RONALD, Newlands, 6 Pavilion Square, Scarborough.
- PRICE: PHILIP JOHN, 193 Station Road, Stechford, near Birmingham.
- PULLEN: ALBERT, Works Department, Customs House, Shanghai, China.
- PULLINGER: SIDNEY LEONARD, 26 Maindee Parade, Newport, Mon.
- RATHBONE: GEORGE, 52 Queen Anne Street, Skelton, Stoke-on-Trent.
- RAYNER: CECIL CHARLES, 30 Hewish Road, Silver Street, Edmonton, N.18.
- READ: JEAN HELEN, Flushing House, Great Bookham, Surrey.
- REDWOOD: REGINALD SEYMOUR, 56 Market Place, Chippenham, Wilts.
- RENNY: ELEANOR MARGARET, Allrighton, near Wolverhampton.
- REUBEN: SAMUEL SIMON, 46 Torrington Square, W.C.1.
- RICE: EDWIN MARSHALL, Raydale, Castle Road, Sandall, Wakefield.
- RICHARDS: JAMES MAUDE, 33B Clanricarde Gardens, W.2.
- RICHARDSON: FREDERICK, Burneston House, Epsom Road, Guildford.
- RICHARDSON: MAURICE STUART, Glen Cottage, Chorley Wood, West Watford, Herts.
- RISBRIDGER: HENRY JOSEPH, Ivydene, The Bass, Guildford.
- RITCHIE: JOHN ARCHIBALD, 3 Chicherton Court, Crawford Street, W.1.
- RITCHIE: JAMES WATSON, c/o Mrs. Duncan, 8 Thirlestane Road, Edinburgh.
- RITCHIE: THOMAS, 59 Gloucester Crescent, Regent's Park, N.W.1.
- RIVIERE: RAYMOND BRITON, 38 Abercorn Place, St. John's Wood, N.W.
- ROBBIE: HENRY PIERCE, Viewmount, Wormit-on-Tay, N.B.
- ROBERTS: DAVID, 118 Church Road, Erdington, Birmingham.
- ROBERTS: NORMAN HARGRAVE, 10 Penraevon Grove, Meanwood Road, Leeds.
- ROBERTSON: GORDON WILLIAM, 69 Woodend Drive, Jordanhill, Glasgow.
- ROBERTSON: JOHN, Palé, Llandderfel, Merioneth, N. Wales.
- ROBINSON: HAROLD CONYERS, 10 Sunny Bank, Hull.
- ROGERS: THOMAS HOWARD, 192 Alcester Road South, King's Heath, Birmingham.
- ROLES: VICTOR HOWARD NORMAN, Hillingdon, 52 Albany Road, Salisbury.
- ROSE: JOHN CRUICKSHANK, 103 Rosebery Road, Muswell Hill, N.10.
- ROSS: BASIL ARMSTRONG, 76 Warton Terrace, Heaton, Newcastle-on-Tyne.
- ROSS: CAROLINE MACDONALD, 28 Fountainhall Road, Aberdeen.
- ROSS: HUGH MICHAEL, 36 Hurlingham Road, Fulham, S.W.6.
- ROWLANDS: BETTY, 10 Harcourt House, Cavendish Square, W.1.
- RUGG: ERIC, Hamlet Court, Westcliff-on-Sea, Essex.
- RULE: FREDERICK, 48 Balham Park Road, Balham, S.W.12.
- RUTHVEN: CYRIL NORTON, Gowrie, Rosebery Avenue, Leighton Buzzard, Beds.
- SALTER: EDWARD THOMAS, 33 Roderick Road, Hampstead, N.W.3.
- SALVIN: THOMAS EDWARD, 118 Broom Road, Rotherham.
- SARGENT: HARRY LIONEL, 48 Brynland Avenue, Bishopston, Bristol.
- SAUNDERS: DYCE CHALMERS, 34 Bedford Square, W.C.1.
- SCHOLEFIELD: CHARLES FRANCIS, Waverley, Shaftesbury Avenue, Roundhay, Leeds.
- SCHUPBACH: FRÉDÉRIC JACQUES ALEXANDRE, 21 Alexandra Court, Queen's Gate, S.W.7.
- SCOTLAND: JAMES CLASON, Mossiel, Airdrie, N.B.
- SCOTT: ROBERT DUNCAN, Eldercroft, Cassio Road, Watford, Herts.
- SCOTT: WILLIAM JOHN, 71 Plymouth Road, Penarth, S. Wales.
- SEARCY: KENNETH ALISTER MILLER, 59 Lucknow Avenue, Mapperley Park, Nottingham.
- SELBY: ROBERT BARNEY JACK, 37 Durward Street, E.1.
- SEWELL: RUPERT STANLEY THOMAS, 14 Brightside Road, S.E.13.
- SHAND: GEORGE SHAW, 54 Kingarth Street, Crosshill, Glasgow.
- SHAPLAND: MARGARET JOY, Bellaine House, Pilton, Barnstaple, N. Devon.
- SHARP: CLIFFORD WILKINSON, 230 Lytham Road, Blackpool.
- SHAW: ROBERT, 4 Crownest Road, Bingley, Yorks.
- SHELBOURN: ALFRED POYNER, 49 Grove Street, New Balderton, Newark, Notts.
- SHELLEY: STANLEY LLEWELLYN, Council House, High Street, Billericay, Essex.
- SHEPPARD: CYRIL ALFRED FREDERICK, The Red Gable, Greenford, Middlesex.
- SHEPARD: RUPERT NORMAN, 53 Sotheby Road, Highbury, N.5.
- SHERREN: BRIAN COURTENAY, 15 Radcliffe Road, Winchmore Hill, N.21.
- SIDEBOTTOM: JOHN GRISEDALE, 12 Burley Lodge Road, Leeds.
- SIMMONS: CHARLES HOWARD, 21 Berkeley Mews, Portman Square, W.1.
- SIMPSON: ROBERT ALISON CREIGHTON, Greyshiels, Kirkstall Lane, Leeds.
- SINCLAIR: ALFRED, The College of Art, Edinburgh.
- SINGLEMAN: JACK ANDREW, 40 Clarence Gate Gardens, Regent's Park, N.W.
- SLATER: HERBERT, 8 Appleby Street, Blackburn.
- SMART: GEORGE DOUGLAS, Ingleside, Crowborough, Sussex.
- SMITH: DAVID ALFRED GEORGE, c/o The Architectural Association, 34 Bedford Square, W.C.1.
- SMITH: FRANK HALLIBURTON, 19 Redington Road, Hampstead, N.W.3.
- SMITH: JAMES, 160 Cambridge Drive, Glasgow.
- SMITH: LEONARD BEDDELL, 142 Lordship Road, N.16.
- SMITH: WILLIAM JOHN, 9 Mayhill Road, Charlton, S.E.7.
- SMITH: WILFRED JAMES JOHN, 33 Artillery Street, Tower Bridge Road, S.E.1.
- SOPER: DOROTHY ELIZABETH, Malcolm's Mount, Stonehaven, Kincardineshire.
- SPEAR: WILLIAM ARTHUR JOHN, The Ship Hotel, Mundesley.
- SPENCE: ARTHUR, 46 Woodlands Terrace, Darlington.
- SPENCE: BASIL, 82 Thirlestane Road, Edinburgh.
- SPENCER: HAROLD CHARLES, 44 Church Road, Stockingford, Nuneaton.
- STATHAM: COLIN WALTER, 34 Bedford Square, W.C.1.
- STEVENS: ARTHUR JAMES, 11 Cambridge Road, Aldershot.
- STEVENSON: RALPH WEBBER, 3 Susans Road, Eastbourne.
- STEWART: HAROLD STANLEY EDWARD BERTRAND, Carlton House, Blackbird Road, Leicester.
- STEWART: JOHN HENRY FRASER, Whitehouse, Lanark, N.B.
- STEWART: REGINALD, 16 King Street, Ulverston, Lancs.
- STOKES: DAVID DOMINIC SCOTT, 3 Mulberry Walk, S.W.3.
- STOTT: HUGH RONALD, 84 The Mount, York.
- STOWELL: REX REPTON, The Schoolhouse, 38 Church Street, Lenton, Birmingham.
- SUTCLIFFE: BRIAN LISTER, 44 Temple Fortune Hill, N.W.11.
- SUTHERLAND: WILLIAM T., 9 Falcon Avenue, Edinburgh.
- TANKARD: SAMUEL HERBERT, 69 Esplanade, Scarborough.
- TAYLOR: FREDERICK ERNEST, 8 Morecambe Terrace, Morecambe.

- TAYLOR: WILLIAM ROBERT HECTOR, Glassel, Aberdeenshire.  
 TEMPLEMAN: KENNETH FREDERICK, 22 Brynglas Road, Newport, Mon.  
 TEMPLETON: FRANK ORR, 2 Kelvin Drive, Glasgow, N.W.  
 THATCHER: CARL AUGUST EMIL, No. 2 Bungalow, South Lock, Alexandra Docks, Newport, Mon.  
 THA TUN MAUNG, 138 Fellows Road, Swiss Cottage, N.W.3.  
 THEOBALD: ROBERT COURTENAY, The Manse, Troutbeck Bridge, Windermere.  
 THISTLETHWAITE: ERIC IRVING, 80 Glen View Road, Burnley.  
 THOMAS: CHARLES HENRY LLEWELLIN, 12 Alma Road, Clifton, Bristol.  
 THOMPSON: ERIC, Ellesmere, Wigston Fields, Leicester.  
 THOMPSON: JACK SCOTT, 130 Queen's Gate, S. Kensington, S.W.7.  
 THOMPSON: WILLIAM, 51 Natal Road, Ilford, Essex.  
 THOMSON: LESLIE GRAHAME, Inglewood, 18 Hermitage Drive, Edinburgh.  
 THORPE: ALBERT NEWTON, Cemetery Lodge, Fulford, near York.  
 TIPPETTS: RUSSELL WARDLE, 47 Alexander Road, Acoc's Green, Birmingham.  
 TODD: GEORGE RICHARD, 68 Hucknall Road, Nottingham.  
 TODMAN: KENNETH ROSS, 172 Burbage Road, Dulwich Village, S.E.  
 TOY: CLEMENT GEORGE, 2 Duffield Road, Derby.  
 TRENT: WILLIAM SYDNEY, 6 Broad Street Place, E.C.2.  
 TRUBSHAWE: WOLSTAN VYVYANT, Little Thaxted, Hay Lane, N.W.9.  
 TURNBULL: THOMAS HUMPHREY, 10 Nattress Street, Trimdon Station, Co. Durham.  
 TURNER: FREDERICK JOHN WILLIAM, 1 Marlborough Buildings, Walton Street, Chelsea, S.W.  
 TUTHILL: WILLIAM FRANCIS, The Avenue, Sheringham.  
 TWENTYMAN: ALFRED RICHARD, Bilbrook Manor, Codsall, Staffs.  
 TWIGG: WILLIAM LESLIE, Dormy House, Walton-on-Hill, near Tadworth, Surrey.  
 TYRRELL: WILLIAM JOHN, Red Croft, Shorncliffe Road, Folkestone.  
 UNDERHILL: ALFRED, 186 Fernhead Road, Maida Hill, W.9.  
 VETCHINSKY: ALEC, 45 Gloucester Road, Regent's Park, N.W.1.  
 VEVERS: JOHN PATRICK, 26 Vernon Road, Bridlington.  
 WAKEHAM: PHILIP OLIVER GEORGE, 3 Kinterbury Terrace, Bull Point, St. Budeaux, Devonport.  
 WALKDEN: JOHN STANLEY, Kenmore, Dales Avenue, Whitefield, Manchester.  
 WALKER: RICHARD MELVILLE, The Limes, Roehampton Lane, S.W.15.  
 WALKER: STANSFELD THOMAS, 5 Harrington Court, S.W.7.  
 WALL: MARY LILIAN JOY, 78 Westmoreland Road, Bromley, Kent.  
 WALLER: ROBERT ERIC, 42 White Hart Street, Mansfield.  
 WALLIS: DOUGLAS THOMAS, 84 Woodbourne Avenue, S.W.16.  
 WALMSLEY: WILLIAM GEORGE, 120 Ribbleson Lane, Preston, Lancs.  
 WARBURTON: GEOFFREY EGERTON, 1 St. James's Street, S.W.1.  
 WARD: BASIL ROBERT, 11 Clement's Inn Passage, W.C.2.  
 WATSON: FRANK COOPER, 22 Woodville Road, Leicester.  
 WATSON: JOHN, 7 Church Road, Giffnock, Renfrewshire, Scotland.  
 WATSON: JOHN HENRY, 1 Carlisle Avenue, Donnybrook, Dublin.  
 WAUGH: DAVID STARK REID, 1 Maitland Avenue, Glasgow, S.1.  
 WESTERMAN: ALBERT EDWIN, 80 St. James's Avenue, Beckenham, Kent.  
 WHEATLEY: ARTHUR HENRY, c/o A. N. Prentice, Esq., 10 Norfolk Street, Strand, W.C.2.  
 WHEATLEY: FREDERICK GORDON, 10 Kemplay Road, Hampstead, N.W.3.  
 WHITAKER: LEONARD, Burnholme, Montreal Avenue Chapeltown, Leeds.  
 WHITE: CLAUDE NEVILLE, San Remo, Church Hill Road Solihull, near Birmingham.  
 WHITEHEAD: EDWARD RONALD, 83 Sinclair Road, W. Kensington, W.14.  
 WHITEMAN: HERBERT WILLIAM, Hawthorns, Stoke Green Coventry.  
 WILCOX: JOHN WALLACE, 421 Holloway Road, London, N.7.  
 WILDE: JACK, 29 Oaklands Road, Kersal, Manchester.  
 WILKES: HARRY ARTHUR HERBERT, 49 Bevington Road, Aston Manor, Birmingham.  
 WILLARD: VERNON ARTHUR, Shellwood, Coonoor, Nilgiris South India.  
 WILLIAMS: GEOFFREY LAURENCE, 139 Ivor Road, Sparkhill Birmingham.  
 WILLIAMS: PERCY THEODORE, West Cottage, Upper Hatherley near Cheltenham.  
 WILLIAMSON: HERBERT LEONARD, Budworth House, Islip Road, Sunnymead, Oxford.  
 WILLIS: NORMAN JAMES SIDNEY, 100 Malvern Road, Kilburn Park, N.W.6.  
 WILLOUGHBY: HENRY FRANCIS, 9 Lansdowne Road, Croydon.  
 WILLSON: GEORGE HERBERT, The Vicarage, Lyme Regis Dorset.  
 WILSON: CHARLES AUGUSTUS, Merrimac, Gloucester Road Cheltenham.  
 WILSON: EDWARD DOUGLAS, 31 Cambridge Street, W.C.2.  
 WILSON: JOHN CRAVEN, Langside, Selbourne Road, Sidcup.  
 WILSON: JAMES WILLIAM GILCHRIST, Shrublands, St. Mildred's Avenue, Birchington, Kent.  
 WINGATE: JAMES WEST CLELAND, 14 Wellshot Drive, Cambuslang, Scotland.  
 WINGATE: MICHAEL MELVILLE FENTON, 45 Cambridge Terrace, Hyde Park, W.2.  
 WOOD: CHARLES, North Villa, Vale of Health, Hampstead N.W.3.  
 WOOD: PHILIP EDWARD, 19 Forrest Avenue, Marsh, Huddersfield.  
 WOODROW: ALAN CARR, 27 Trebovir Road, Earl's Court S.W.5.  
 WOOTTON: FRANK, Trewen, Victoria Avenue, Bloxwich.  
 WOTTON: GEORGE TREVOR, Haulfryn, Mold.  
 WRIGHT: FRANCIS WILLIAM, 81 Crimicar Lane, Fulwood Sheffield.  
 WRIGHT: JOHN HESKETH, Rose Cottage, Walton Inferior Warrington.  
 WRIGHT: ROLAND HOLLIS, 21 Haughton Road, Handsworth Birmingham.  
 WRINCH: BERIS, Redroofs, High Road, Felixstowe.  
 WYLIE: FREDERICK ROBERT, 2 St. Mary's Place, Glasgow, W.  
 YEATMAN: IDA M., Shaftesbury House, St. Mary's Row Birmingham.  
 YORKE: FRANCIS REGINALD STEVENS, Llwynon, Ivor Road Redditch.  
 YOUNG: RALPH ARNOLD, Glen-Maye, Gedling, Notts.

#### ARCHITECTS' BENEVOLENT SOCIETY. INSURANCE SCHEME, FOUNDED 1923.

All kinds of insurances negotiated: Life, Motor Cars Burglary, Protection of Buildings in course of erection, etc. Over £200,000 has already been insured. Enquiries to the Secretary, A.B.S., will meet with immediate attention.

Architects' Benevolent Society,  
9 Conduit Street, W.1.

Telephone: Mayfair 0434.



# EXHIBITION OF DESIGNS OF STUDENTS OF RECOGNISED SCHOOLS FOR EXEMPTION FROM THE R.I.B.A. FINAL EXAMINATION.

The designs of Students of recognised Schools exempted from the R.I.B.A. Final Examination, with the exception of the subject of Professional Practice, will be exhibited from Monday, 13 September, to Thursday, 23 September, inclusive, from 10.0 a.m. to 7.0 p.m. daily, in the Galleries of the R.I.B.A., 9 Conduit Street, W.1. Saturdays to 2.0 p.m.

The R.I.B.A. Board of Architectural Education Silver Medal for recognised Schools is awarded for the best set of designs submitted. This year the following Schools, which have courses of five or more years' duration, recognised by the R.I.B.A. for exemption from the R.I.B.A. Final Examination, have sent exhibits:—

- The Robert Gordon's Colleges, Aberdeen.
- The Edinburgh College of Art,
- The Glasgow School of Architecture,
- The University of Liverpool,
- The Architectural Association, London,
- The Bartlett School of Architecture, University of London,
- The Victoria University, Manchester,
- The McGill University, Montreal.

In addition, drawings have been received from the Department of Architecture of the Technical College, Cardiff, and from the School of Architecture, Leeds School of Art (at present recognised for exemption from the R.I.B.A. Intermediate Examination), certain of whose Students have been granted special exemption from the R.I.B.A. Final Examination, with the exception of that portion of the Examination relating to Professional Practice.

## REGISTRATION AS PROBATIONER R.I.B.A.

Special attention is called to the fact that, except in very special cases, a Headmaster's Certificate will not be accepted as a qualification for registration as Probationer R.I.B.A. after 1 October 1927, and no one will be registered as a Probationer unless that person has passed one of the recognised public examinations in the required subjects.

A list of the examinations recognised may be obtained free at the R.I.B.A.

## R.I.B.A. EXAMINATIONS.

JUNE AND JULY 1926.

The questions set at the Intermediate and Final (or Special) Examinations held in June and July 1926 have been published and are on sale at the Royal Institute, price 1s. 6d. (exclusive of postage).

## Notices

### INFORMAL ILLUSTRATED LECTURE ON ARCHITECTURE FOR WORKERS IN THE BUILDING TRADES.

The Council of the R.I.B.A. are holding an Informal Illustrated Lecture on Architecture confined to workers in the building trades. This lecture will take place on Thursday, 7 October 1926, at 7.30 p.m., at the R.I.B.A., Conduit Street, W.1. The subject will be "The Job,"

and the lecturer will be Mr. L. Sylvester Sullivan, F.R.I.B.A., Hon. Secretary of the Board of Architectural Education.

All men employed in the work of building are cordially invited, admission being free. Buffet refreshments will be served at 7.30 p.m. before the lecture.

### ARCHITECTS' DEFENCE UNION.

The attention of members is particularly drawn to the leaflet enclosed with this issue of the JOURNAL, in which the objects of the proposed Union are outlined.

### ELECTION OF MEMBERS.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that, if they wish to take advantage of the election to take place on 29 November 1926, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than 2 October 1926.

### LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

### R.I.B.A. JOURNAL.

The attention of all Members is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. This does not mean that members are expected to urge contractors and manufacturers to advertise in the JOURNAL; they can, however, do a great deal if they will read the JOURNAL regularly and avoid any needless depreciation of its advertising value.

### ROOMS FOR ARBITRATIONS, ETC.

Convenient rooms for arbitrations, etc., are now available for hire at No. 28 Bedford Square, W.C.1, at a fee of £2 2s. per day. All enquiries with regard to vacant dates, etc., should be addressed to Mr. C. McArthur Butler at that address.

### R.I.B.A. KALENDAR, 1926-27.

The Kalendar for the coming Session is now in course of preparation. Changes of address, etc., should be notified to the Secretary, R.I.B.A., 9 Conduit Street, W.1., as soon as possible.

## Competitions

### LEAGUE OF NATIONS BUILDING AT GENEVA.

The conditions of the competition for the new building at Geneva have been received. The jury consists of M. H. P. Berlage (The Hague), Sir John J. Burnet (London), M. Charles Gato (Madrid), M. Joseph Hoffman (Vienna), M. Victor Horta (Brussels), President; M. Charles Lemaesquier (Paris), M. Karl Moser (Zurich), M. Attilio Muggia (Bologna), M. Ivar Tengbom (Stockholm). The competition will be open until 25 January 1927. Total cost including the architect's fees should in no case exceed the total sum of 13 million Swiss francs. Copies of the conditions may be obtained at the Secretariat, Geneva, at a cost of 20 Swiss francs.

**CENOTAPH FOR LIVERPOOL.**

The Corporation of Liverpool invite architects to submit designs in competition for a Cenotaph to be erected on a site on the plateau in front of St. George's Hall, Liverpool. Assessor, Professor C. H. Reilly, O.B.E. [*F.*]. Premiums, £200, £150, £100, and £50. Last day for receiving designs 30 September 1926. Total cost £10,000. For conditions apply to Town Clerk, Municipal Buildings, Liverpool.

**RECONSTRUCTION OF THE MOSQUE OF AMROU, CAIRO, COMPETITION.**

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

**SCHEME FOR BUILDING LARGE RESIDENCES, CAIRO.**

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competition.

**COMPETITION FOR THE LAYOUT OF HOUSES ON PENY-WAUN SITE.**

The Competitions Committee desire to call the attention of Members to the fact that the Conditions of the above Competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the Competition.

**MANCHESTER TOWN HALL EXTENSION.****PRELIMINARY COMPETITION.**

The Corporation of the City of Manchester invite architects to submit designs in competition for the Town Hall Extension, Municipal Offices, and Public Reference Library proposed to be erected on a site adjoining the Town Hall. Assessors, Mr. T. R. Milburn [*F.*], Mr. Robert Atkinson [*F.*] and Mr. Ralph Knott [*F.*]. Last day for questions 2 October 1926. Final date for submission of designs 8 January 1927. Conditions may be obtained by applying to the Town Clerk, Town Hall, Manchester, and depositing £1 rs.

## Members' Column

**MESSRS. LEWIS SOLOMON & SON.**

MR. M. N. CASTELLO, F.R.I.B.A., has joined Mr. Digby L. Solomon in partnership, the name of the firm remaining Lewis Solomon & Son.

The firm has moved its offices from 133 Moorgate, E.C., to 21 Hart Street, Bloomsbury Square, W.C.1.

**PARTNERSHIP OR PRACTICE WANTED.**

ARCHITECTURAL PRACTICE (or partnership) wanted to purchase by Associate R.I.B.A. Reasonable price paid for genuine business. Country or town. Apply Box 1196, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

WANTED to purchase: well-established Practice or Partnership in a prosperous Country Town. Apply Box 8668, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

A.R.I.B.A. (35) desires partnership, or post with view to partnership, in London or the provinces. Trained in recognised School

of Architecture (full-time course), and nine years' general office experience. Chief assistant for two years. Use of own London office address and 'phone could continue. Box 3926, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

F.R.I.B.A., age 42, requires Junior Partnership or position of trust with view to same with good established firm of Architects in London or South. First-class London experience. Small capital available. Keen and active.—Reply Box 6244, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**PRACTICE FOR SALE.**

SMALL PRACTICE for sale in Country town, 25 miles from London. Present owner (Associate R.I.B.A.) has obtained official appointment which necessitates giving up private practice.—Apply Box 3332, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**TO LET.**

OFFICE TO LET, John Street, Bedford Row. Well lighted, quite self-contained room. £52 p.a., inclusive of electric light, telephone cleaning. Typing and attendance by arrangement.—Box 139, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

A.R.I.B.A., wishing to conduct his practice largely from his private residence in country, desires to let, furnished or unfurnished his small West End office, himself retaining a small interest therein. One who might be willing to enter into some working arrangement preferred.—Apply Box 8926, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**STUDENT RECOMMENDED.**

A.R.I.B.A. wishes to recommend a young Dutch Student Architect who has just completed a Technical School Course in Utrecht and is anxious to enter an Architect's office in England for the purpose of gaining experience in English methods—more particularly in housing work.—Apply Box 1096, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**CORRESPONDENT WANTED.**

F.R.I.B.A., with well-established practice in India, desires correspond with a well-established Architect in London with view to a working arrangement or disposal of share of practice. Reply Box 3086, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**CHANGE OF ADDRESS.**

MESSRS. J. J. CROWE and S. STOCKFORD CARELESS, A.A.R.I.B.A., have removed from 7 New Square, Lincoln's Inn, to 2 Garden Court Temple, E.C.4.

MR. S. H. LOWETH [*A.*], Architect and Surveyor, has changed his address to "Westways," The Mount, Fetcham Park, Leatherhead, Surrey.

MR. ARTHUR BARTLETT [*F.*] has changed his address to 18 Adelaide Street, Adelphi, W.C.

**OFFICE WANTED.**

F.R.I.B.A. requires unfurnished office, two small rooms or only with use of general office. W. or W.C. district. Please state particulars with inclusive terms.—Box 3387, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

LICENTATE requires desk accommodation, for few hours daily in West End office, near Oxford Circus. Occasional assistance will be required by arrangement and some typing.—Reply Box 711, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

TWO OFFICES required in neighbourhood of Bedford Square, or about 400 ft. square and one smaller.—Reply Box 3424, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**TRADE CATALOGUES.**

MR. ASHLEY F. BENJAMIN [*A.*] has changed his address to 98 George Street, Portman Square, W.1 (Telephone: Langham 3061), and will be glad to receive trade catalogues.

MESSRS. LANDER & KEMP have opened an office at 21 Bedford Row, W.C.1 (Telephone: Chancery 8283), and would be glad to receive trade catalogues.

MR. CLAUD H. BENWELL, L.R.I.B.A., Southam Chamber, Waltham Street, Hull, would be glad to receive trade catalogue.

**APPOINTMENT WANTED.**

ARCHITECT (A.R.I.B.A.), age 27, at present Chief Assistant with large West Country firm, desires responsible position, or assistantship with view to partnership. Large experience in successful competition work, public buildings, shops, etc. Experienced surveyor and leveller. Excellent references.—Reply Box 83, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**R.I.B.A. JOURNAL.**

Date of Publication.—1926: 16 October.



# Journal of the Royal Institute of British Architects

VOL. XXXIII. No. 20

THIRD SERIES

16 OCTOBER 1926

## Contents for 16 October 1926

	Page
DRAWING ATTRIBUTED TO CHARLES LE BRUN (Frontispiece) .. .. .	586
POST-WAR ARCHITECTURE IN GERMANY. Illustrated. By Dr. Hermann Muthesius .. .. .	587
OSTIA, THE ANCIENT PORT OF ROME. By F. O. Lawrence .. .. .	597
ROYAL COMMISSION FOR CROSS RIVER TRAFFIC: Evidence by Lord Crawford (A. R. Powys), Mr. Arthur Keen and Sir Banister Fletcher .. .. .	606
ELEMENTS OF DESIGN AND THE TEACHING OF BUILDING CONSTRUCTION. By Professor A. E. Richardson .. .. .	612
REVIEW OF BOOKS ILLUSTRATING THE EXHIBITION OF DECORATIVE ARTS, PARIS. By J. Murray Easton .. .. .	616
CORRESPONDENCE :	
BROADCAST CRITICISM. By James Ransome .. .. .	616
OBITUARY :	
SOMERS CLARKE. By Mervyn Macartney .. .. .	617
SIR CHARLES TAMLIN RUTHEN. By Dr. Raymond Unwin .. .. .	618
GEORGE WITTET. By John Begg .. .. .	618
LEGAL : THE STANDARD OF NATURAL LIGHTING IN TOWNS. By Percy J. L. Waldram .. .. .	619
THE PRINCE OF WALES AND DOMINION ARCHITECTURE .. .. .	620
A.B.S. SCHEME OF INSURANCE .. .. .	619
WARNING TO MEMBERS .. .. .	619
BOARD OF ARCHITECTURAL EDUCATION .. .. .	620
NOTICES .. .. .	620
ELECTION OF MEMBERS .. .. .	621
COMPETITIONS .. .. .	623
MEMBERS' COLUMN .. .. .	624



FROM AN ORIGINAL DRAWING ATTRIBUTED TO CHARLES LE BRUN  
(R.I.B.A. Collection)





RHINE-HALL, DUSSELDORF EXHIBITION, 1926  
Architect: Wilhelm Kreis

## Post-War Architecture in Germany

BY DR. HERMANN MUTHESIUS

*[Honorary Corresponding Member]*

**B**EFORE giving a survey of post-war architecture in Germany it should be pointed out that the extent of building has been very small because Germany, worn out through the war,<sup>1</sup> was obliged to attend only to her most urgent needs. Her greatest need was a supply of dwelling-houses, because during, and shortly after, the war building had almost entirely ceased; and it has not yet been possible to solve the post-war housing problem even to a tolerable degree. Apart from the impoverishment of the country, the legal protection afforded to tenants has contributed to this result. As in other countries during the war, it was found necessary to introduce state control in order to avoid an undue increase in rents, but whereas in other countries post-war rents were gradually raised and adapted to the general economic conditions, the rents in Germany have been maintained by the Government up to the present at

so low a figure that in the case of new buildings they would have to be increased at least to three or four times the amount of the rents of pre-war houses. However, as it was necessary to build, the state put forward schemes of subsidies. By this means the building of houses has been started on new lines. It is, however, far from satisfactory, as it has been found impossible to reduce the rents of new houses to less than double the rents of the old houses. Here is a problem which no one yet knows how to solve; because, if the Government would allow in the present social distress the raising of old rents considerably, it would mean raising wages at the same time, which the present German economic conditions cannot stand.

It is to be noted that the new subsidised buildings show a considerable improvement compared to the pre-war architecture. In view of the sub-

sidy the state exercises the right to influence the planning and construction of the houses. Moreover, since the war a new building law has been passed which does away with the bad planning of the old town blocks of flats. Another change, at least in large towns, which has taken place is that the state subsidises only those buildings which are planned by architects. This is important because the pre-war blocks of flats were, almost without exception, erected by speculative builders; hardly

not be continued. Nowadays the most usual form of building is for the houses to be arranged in rows. The new building regulation has involved considerable reductions not only in height but also in the width of the buildings. If it were possible to adapt the old rents to the new houses, if only to a limited extent, a sufficient supply of houses would soon be forthcoming.

Apart from the building of houses great progress has been made since the war in industrial



GARDEN CITY DWELLING HOUSES AT ZEHLENDORF-WEST  
Architects: Paul Mebes and Paul Emmerich

in any case was an architect employed; the flats were simply a by-product of land speculation.

The new building regulation together with the state subsidy has produced satisfactory results if not in quantity at least in the quality of the buildings. The planning of most of the new houses is good; the architecture is simple and dignified. Round every German town a belt is being formed of new garden-city buildings erected under state control. Detached and semi-detached houses, however, formerly the aim of garden-city building in Germany, have proved too expensive and can-

and factory buildings. Here, too, a considerable improvement is apparent. Formerly no particular attention was paid to the appearance of such buildings, but architects are now being called upon to design them. A great many of them were erected in consequence of the inflation, when all currency had to be materialised in real property as it otherwise rapidly lost its value. The result of the stabilisation of the mark and the consequent economic depression is that, in many cases, the factories are overburdened with buildings, which only add to the expense, as they must be kept in good condition





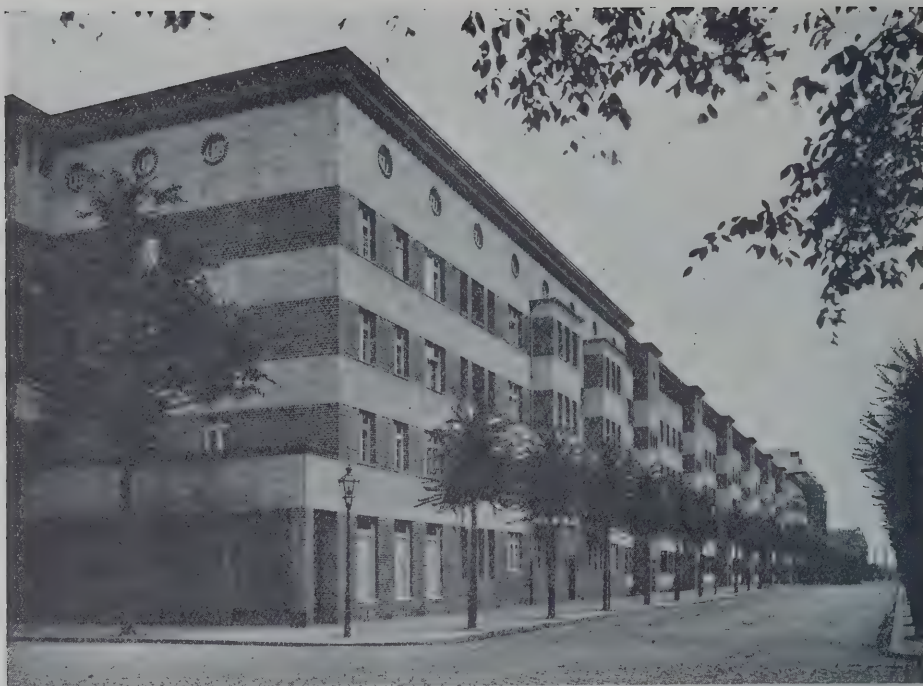
HOUSE IN MÜNCHEN-LAIM  
Architect: Theodor Fischer, München



HOUSE AT CHARLOTTENBURG  
Architect: Hermann Muthesius, Berlin-Nikolassee



ROW OF HOUSES NEAR BOTANIC GARDENS, BERLIN  
Architect: Otto Rudolf Salvisberg



GROUP OF HOUSES IN BERLIN-NEUKÖLLN  
Architects: Paul Mebes and Paul Emmerich, Berlin



HOUSES AT WITTENAU, NEAR BERLIN  
Architect: Hermann Muthesius, Berlin-Nikolassee





HOUSE OF R. FRENKEL, GRUNEWALD—GARDEN ENTRANCE  
Architect: Albert Gessner

and the interest on the cost of building has to be paid.

Apart from the buildings already mentioned little has been built. The building of country houses which was carried on extensively in pre-war days has almost ceased. A few *nouveaux riches* have erected large houses; in most cases, however, they have not had the judgment to employ a good architect but have given the commission to builders and minor architects who had pushed themselves

ture. They hold that the whole of existing architecture is wrong and that an entirely new architecture must be created. It is a common delusion that the germs of this new architecture are to be found in America. Sky-scrappers are highly admired, and the young architectural world is dominated by the desire of designing skyscrapers. In public competitions of any sort, the majority of plans are provided with a tower-like part, even when the purpose of the building is unsuited to it. It is



BOARD SCHOOL, HAMBURG  
Architect: Fritz Schumacher, Hamburg

forward. Only a fraction of post-war country houses has fallen into the hands of architects of repute.

Plans for large office buildings, railway stations, theatres, concert halls and other public buildings, have been designed in plenty, but none has been executed. Generally speaking, architects exhaust themselves since the war in *projets*. This exclusion from real work induces young architects often to indulge in fantastic and eccentric compositions of all sorts. The new generation is captivated by the problem of a so-called new architec-

ture. They hold that the whole of existing architecture is wrong and that an entirely new architecture must be created. It is a common delusion that the germs of this new architecture are to be found in America. Sky-scrappers are highly admired, and the young architectural world is dominated by the desire of designing skyscrapers. In public competitions of any sort, the majority of plans are provided with a tower-like part, even when the purpose of the building is unsuited to it. It is

entirely forgotten that in the present distress in Germany the cost of these tower-like erections prevents the carrying out of any construction of this sort, apart from the fact that in Germany neither the conditions of the site nor the amount of business, such as exists in New York, make a skyscraper desirable. The present German craze for sky-scrappers resembles an epidemic disease.

Inspiration for the new architecture is also derived from the works of the American architect, Frank Lloyd Wright. His name is current among the young generation, and he is considered the



leader of the New Architecture. The works that have really been executed in the "new style," however, have little resemblance to the work Wright does in America. The architecture which the young group aims at follows the latest Dutch line. Cubic-shaped and roofless masses are the formal principle that obsess the mind of the young generation.

"house," by which they mean that a house should be constructed like a machine.

It is somewhat amusing to note that the representatives of cubic constructions deceive themselves into believing that their creations are purely constructive and economic and that they have nothing to do with art. They claim to build usefully and at the same time they sin largely against usefulness



NEW BUILDING FOR DRESDEN BANK, CHEMNITZ  
Architect: Heinrich Straumer, Berlin

Another source of influence lies in the "machine." The machine is declared to be the most perfect creation of man, because it is designed only to be useful. As usefulness is declared to be the real aim of every human work, the machine is considered to be the model even for architectural construction. Some architects of the young generation even go so far as to say (from the example of Le Corbusier) a "living machine" instead of a

and construction. The reason is that their minds are entirely possessed by the suggestion of cubic form.

Only very few examples of such "modern" buildings have been executed, but a formidable amount of philosophic and æsthetic literature has developed, which deals with the problems of the so-called New Architecture, and writers of journals and newspapers sympathise, as a rule, with the new tendencies. However, it is a well-known



FACTORY BUILDINGS, OBERHAUSEN  
Architect : Peter Behrens, Neubabelsberg

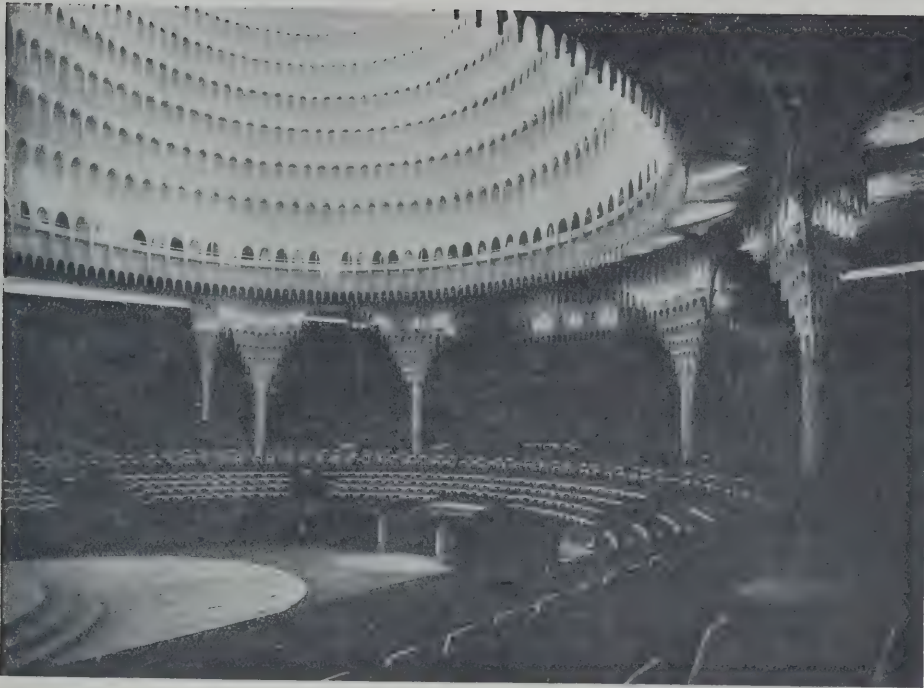


WAREHOUSE, NÜRNBERG  
Architect : E. Fahrenkamp



OFFICE-BUILDING AT DUSSELDORF  
Architect : Paul Bonatz, Stuttgart





AUDITORIUM OF A BIG THEATRE, BERLIN  
 Architect: Pölzig, Potsdam



INTERIOR OF WIRELESS EXHIBITION HALL, BERLIN  
 Architect: Heinrich Straumer, Berlin

fact that even the biggest output of literature does not bring about a new art if the art does not possess sufficient life to assert itself, and whether this is the case is an open question. It is fortunate, however, that the majority of architects now active in Germany work on normal, progressive lines and have nothing to do with the extravagant fancies of the "Modern Architects."

Since 1900 a freer kind of architectural expression has become established. It is founded on industrial and commercial buildings which were the first to dispense with the classic orders.

Classical forms are still here and there employed, but generally speaking classic architecture in Germany can be considered as extinct.

It is satisfactory to note that brickbuilding has come to the front and become firmly established, especially in northern Germany.

Were German architecture given a chance it would be seen that it is on the healthy road to progress. The fantastic efforts of the young generation would, through practical work, become modified and the influence of the philosophy of a revolutionary architecture would diminish.





# Ostia: The Ancient Port of Rome

BY F. O. LAWRENCE, B.A.RCH. [A.], ROME SCHOLAR IN ARCHITECTURE, 1920.

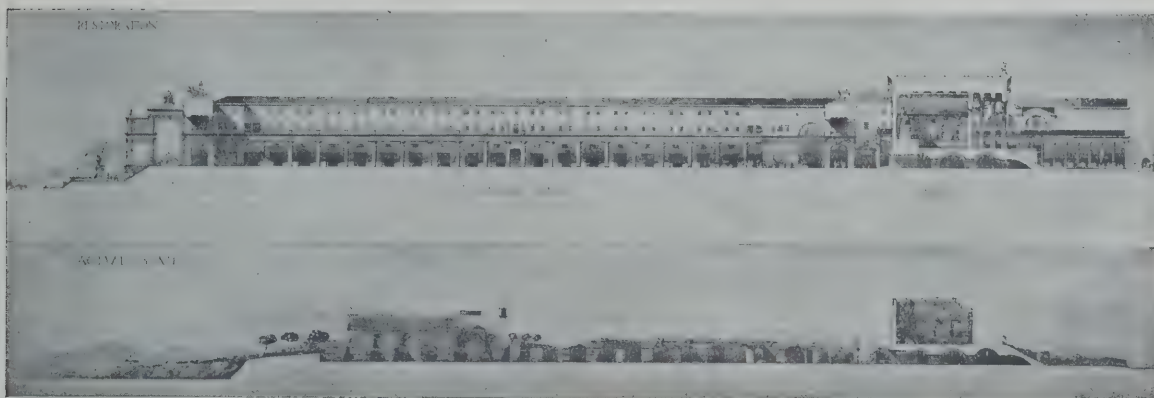


FIG. 4.—SECTION ALONG VIA DEL TEMPIO, FROM TEMPLE OF JUPITER TO RIVER TIBER

OSTIA, which is still in the process of excavation, offers a new, if apparently unexciting, subject for study. But it is far from being a dull subject, because the discoveries at Ostia have added a new chapter to our knowledge of the Roman world, and in particular are throwing new light on the commercial buildings and private dwellings of the Romans.

As far as we can judge from the excavated portion, the city consisted chiefly of commercial buildings and private dwellings, and the temples and public buildings have so far proved to be the least interesting part of its composition. In many parts of Italy the public buildings and temples can be studied to better advantage, but no other place gives us so many examples of the private and commercial buildings of this period. Ostia held the same position of importance to the Roman world as Liverpool does to England. All the great shipping corporations had their headquarters there, and the docks and great storehouses were comparable with those of our own city to-day.

Judging from the earliest remains which have been found, Professor Vagliere places the foundation of Ostia, the ancient port of Rome, at about the third century B.C. Not until 217 B.C. during the second Punic war is it mentioned as a naval base and harbour of Rome. Stone walling which can definitely be assigned to the Republican period is fairly common, but in most cases it has been reused as foundations for larger buildings. That the earliest city covered quite

a small area has been recently shown by Professor Calza, who is now in charge of the excavations and has lately discovered its complete circuit. Several buildings still remain of the Augustan period, among the most notable of them being the theatre.

Ostia stood on the left bank of the Tiber. Claudius built a harbour on the right bank and connected it with the river by a canal which formed an island of the land thus cut off. Trajan further developed this scheme and built another harbour (Fig. 1).

Domitian, who became Emperor in A.D. 79, seems to have begun the rebuilding of Ostia on the higher level on which it now stands, but the greater part of the work belongs to the period of Hadrian and the Antonines in the second century. Afterwards, as the sea gradually receded and the river changed its course, Ostia lost its importance and Porto, as the new port was called which grew up on the right bank of the river, had already in the fifth century superseded it. In the sixth century Ostia is described as being far from the banks of the river and undefended by walls and the Via Ostiensis, the great road to Rome, entirely neglected, while ships still came into Porto and discharged their cargoes into barges to be towed up to Rome by oxen.

The incursions of pirates further assisted the destruction of Ostia, which gradually became a stone quarry, from which marble was afterwards transported for the building of the cathedrals of Pisa and Orvieto.

In the middle ages the still inhabited village of Ostia

sprang up not far from the old port, and in the fifteenth century the fine castle which still stands was built by Giuliano da Sangallo on a bend of the river. After a great flood in 1557 the river again changed its course and is now some distance away. The modern village stands three miles from the sea, but a new town is springing up on the coast and rapidly becoming a popular seaside resort. The advent of an electric railway which has just been completed will help this development, and make the excavations more easily accessible to visitors. A fee of five lire has also just been imposed for admission, and this no doubt will attract many tourists.

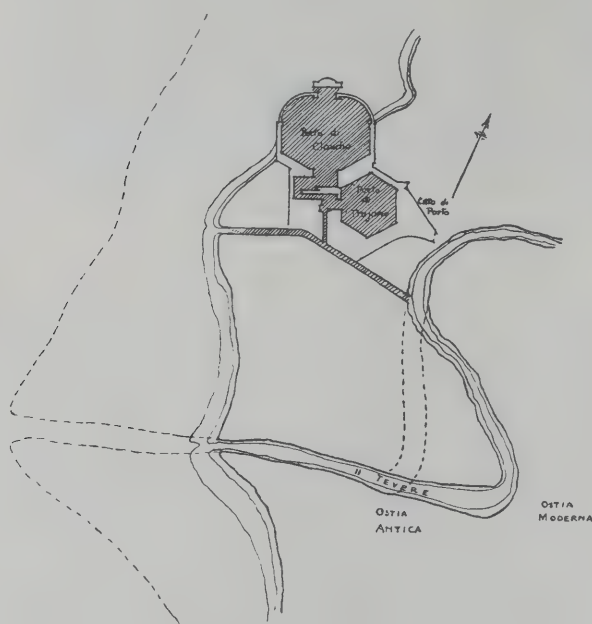


FIG. 1.—HARBOUR OF CLAUDIUS AND TRAJAN

The area at present excavated, which is only a small part of the whole city, lies between the main road to Rome and the river (Fig. 2). If we approach Ostia by this road, our way to the city gate lies through the cemetery. Inside the gate after passing an area of smaller domestic buildings we come to the baths, which are chiefly notable for a very fine black and white mosaic on a large scale. Behind the baths are the barracks of the "Vigiles." Numerous scratchings on the walls of this building are of interest. One name is scratched several times outside the main entrance, and it is surmised that one of the garrison failed to return before the gates were shut, and spent the night outside, whiling away the time by scratching his name on the wall. Inside are to be found scratchings referring to sergeant-majors, which make it quite clear

that sergeant-majors were no more popular than they were during the late war.

Farther on we pass the open air theatre, and behind the Piazza delle Corporazione which enclosed the temple of Ceres. Here the important shipping firms had their offices and outside each shop or office is a



FIG. 2.—OSTIA: RESTORED GENERAL PLAN FROM THE FORUM TO THE TIBER

mosaic in black and white depicting their particular line of business, and in some cases giving the name of the firm. This piazza was formerly thought to be the forum.

We then pass an area of shops and houses and two very large warehouses. It is interesting to note in these warehouses that the ground floor is raised about 9 inches from the ground, so that air circulates freely underneath and the floors are





FIG. 3.—PHOTOGRAPH LOOKING ACROSS FORUM FROM TEMPLE OF AUGUSTUS AND ROME  
TOWARDS TEMPLE OF JUPITER

in consequence always dry. Grain was probably stored here.

Beyond this we come to the forum and the real centre of the town and the area which I have taken as the subject of my restoration. Most of the buildings here were constructed during the life of Hadrian, but the site of the earliest city lies within this area. The forum has only recently been identified and is still in the early stages of excavation. It contains a temple dedicated to Augustus and Rome. Facing the forum across the main road are the Capitol and temple of Jupiter (Fig. 3). This was probably the finest architectural feature of the city and fragments of practically a complete entablature compare favourably in style and workmanship with the best work of this period.

Behind this temple but slightly off its main axis a broad arcaded street of shops runs to the river. It begins at the temple end with a portico of brick piers, and probably originally terminated at the river end in the same way, but here the river has changed its course and encroached on the city, and it is not quite clear what happened at this end. It is however practically certain that a broad roadway ran parallel to the river bank and that there were quays for loading and unloading barges which plied the river between Ostia and Rome (Figs. 4, 5 and 6).

To the left of this Via del Tempio, and separated from it by a narrow unpaved passage, is a large open market, with a covered arcade all round, off which open large storerooms. A concrete vault covered these rooms, and staircases at two angles show that the building was at least another storey high. Adjoining this on the west is an exactly similar market on a smaller

scale. This is bounded again on the west by a row of shops opening on to the Via Epagathiana, called after a warehouse recently discovered on this street in which was found a tablet bearing the inscription, "Horrea Epagathiana et Epaphroditiana" (Fig. 7). The street is only partly excavated, but the warehouse has been cleared and is being reconstructed. The entrance is through a fine portone, the many fragments of which have been



FIG. 5.—STAIRCASE AT ONE END OF VIA DEL TEMPIO

carefully put together and rebuilt in their original positions. It follows the usual form in Ostia and is composed of three-quarter columns carrying a richly deco-

imposed arcades. The niche probably contained an image of one of the gods and is all in rubbed brick of different colours (Fig. 8).

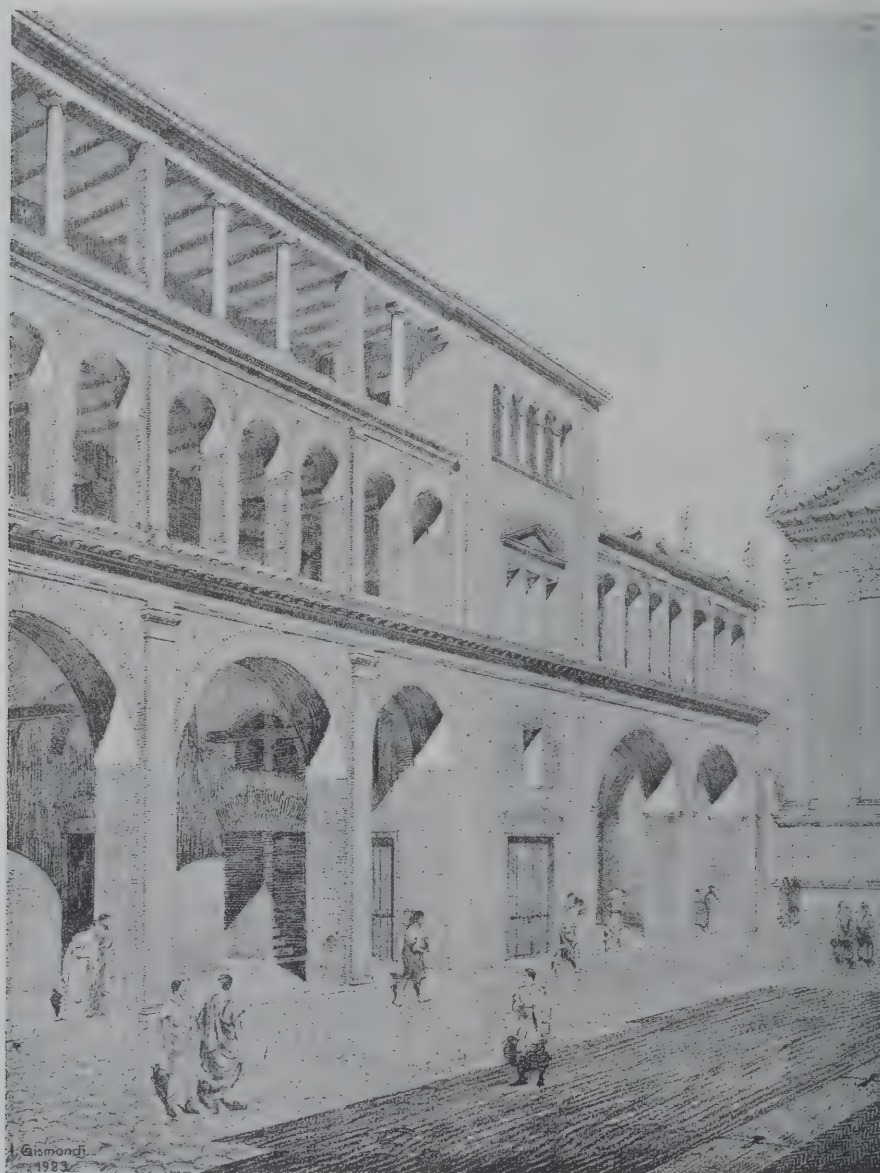


FIG. 6.—OSTIA: RECONSTRUCTION OF A HOUSE IN THE VIA DEL TEMPIO (Architect: I. Gismondi)

rated entablature and pediment all in brick. A long passage leads to an arcaded cortile off which are lock-up storerooms. In general form this cortile closely resembles those of the later Italian palazzi with super-

To the north of this block is the office of the measurers, the officials who measured the grain before distribution. Only the entrance to this building is preserved. It is enriched with brick pilasters carrying



a pediment in which is the sign of the measurers in terra-cotta.

To the east of this runs a street of shops noteworthy because it is covered on both sides, on the one side by means of an arched arcade and on the other by

The area to the east of the Via del Tempio contains many examples of shops and private dwellings. The Case di Diana is of particular interest, a private house which has many points of resemblance to the "domus" of Pompeii but is unique at Ostia.

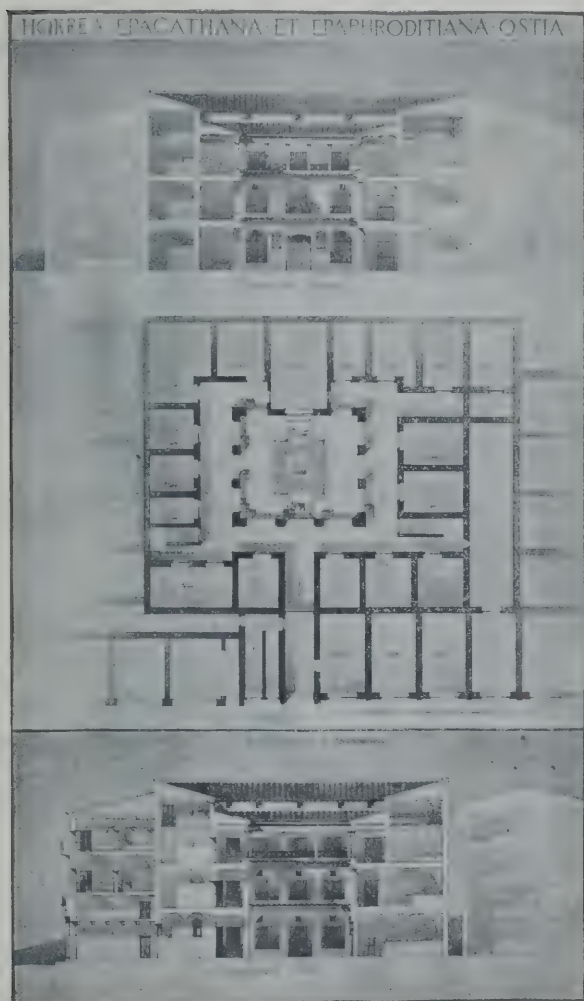


FIG. 7.—PHOTOGRAPH OF DRAWING  
RESTORATION OF HORREA EPAGATHIANA ET EPAPHRODITIANA

means of a balcony carried on stone corbels (Figs. 9 and 10).

On the main street lies a building called the "bazaar." Here, entering through a narrow passage, we come to a courtyard surrounded by shops. Staircases lead to living rooms above and there must have been a wooden balcony all round (Fig. 11).

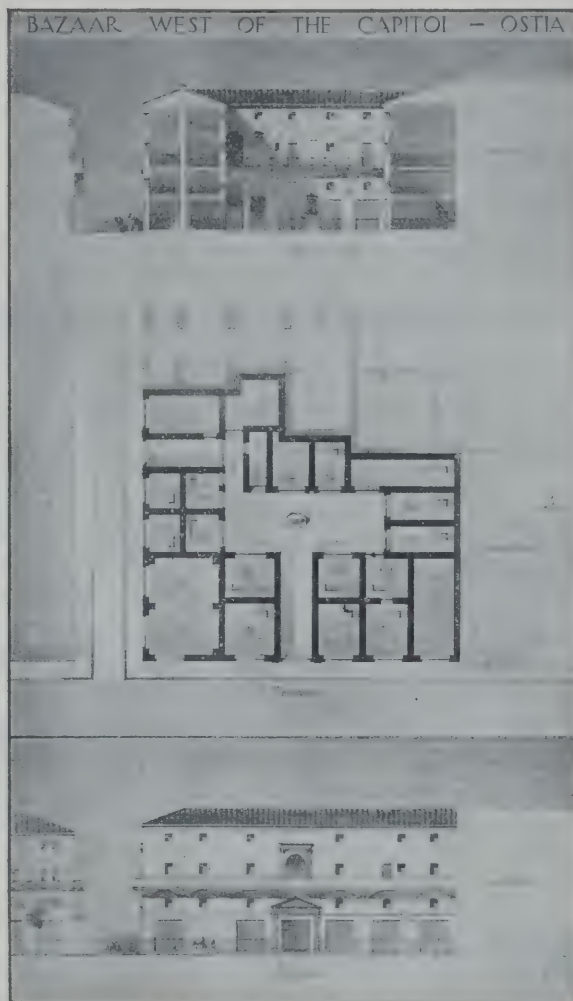


FIG. 11.—PHOTOGRAPH OF DRAWING  
RESTORATION OF BAZAAR ON MAIN STREET

The "caupona" or cook shop on the opposite side of the street is an interesting example of a type belonging to a later period, and bears a striking resemblance to a modern Italian "bar."

The Insula dei Dipinti, a block of apartment dwellings, is an example typical of Ostia (Fig. 12). It is L shaped in plan, containing three houses of

which the largest, forming the base of the L, and known as the Casa di Giove e Ganimede, probably belonged to the owner of the block and contained a shop (Fig. 13). The other two are similar in plan. At the back they overlook an open space which was probably a garden, as no paving has been found there (Fig. 14). It takes the place of the peristyle of the "domus," and corresponds to the "cortili of the later palazzi." The walls throughout the ground floor are concrete with a brick facing and about 60 cms. thick. The rooms are vaulted in concrete at a height of 8 metres and except in the more important rooms there is a mezzanine floor at a height of 4 metres.

Pompeii. The designs are generally formal, and crude attempts at perspective are occasionally introduced; the colours are brilliant and generally well preserved. The floors of the principal rooms are finished with mosaic in black and white geometrical patterns. Mica was used for the windows, probably in a wooden frame, as no trace of marble or metal has been found.

Taking the plan of the middle house as a typical example, the Casa di Bacco Fancuillo, called after a small statuette found in the garden, we see it is divided into three sections. The centre section contains a corridor A, opening directly on to the street, and a vesti-



FIG. 8.—CORTILI OF THE HORREA EPAGATHIANA ET EPAPHRODITIANA

The remains of staircases prove that there was a third floor, and as the law laid down a height limit of 20 metres for private buildings we can imagine this block to have been four or five storeys high. The thickness of the walls are a further indication that it was of considerable height. The balcony at the first floor is formed by the extension of the vault beyond the outside wall about 1 metre and arching back. The main entrances are enriched with pilasters and pediments built in hard faced red brick with a very thin joint; the remainder of the façade was faced with bricks varying in colour and with a thicker joint, and was most probably finished in plaster. Internally the walls were finished with plaster and painted, but the work never reaches such a high standard of excellence as is found at

bule B, which together serve as a means of circulation between the remainder of the rooms. It is difficult to assign to any particular use the other three small rooms of this section. The two rooms D and E in the left section were probably dining rooms and both obtained light from the garden front, one by means of a large window in the dividing wall. The right section also contains two large rooms; that on the garden front clearly corresponds to the tablinum of the "domus." It is 8 metres in height and has six large windows in two rows overlooking the garden. The walls are elaborately decorated with paintings and the floor contains a staircase, the only means of communication with the mezzanine floor. The first three steps are in



brick, the remainder in wood. This room must have been for the service of the house.

The staircase between this house and the larger corner house, built in travertine, ascends directly to the second floor, on which was a separate apartment similar in plan to the ground floor. The staircase ascends

portant and typically Roman city, and the type of dwelling found there must have been modelled on the Roman type, and must take precedence over the "domus" of Pompeii as being typical of the Roman dwelling of the second century. The theory that foreign influence determined the arrangement of the Ostian



FIG. 9.—ARCADE TO STREET



FIG. 10.—BALCONY CARVED ON STONE CORBELS

again to the third floor to another similar apartment. Altogether there were 15 apartments in this block.

Ostia considerably extends our knowledge of the Roman habitation. In the Roman world there were two types of dwelling, the "domus," as seen at Pompeii, which is well known and, I believe, generally accepted as being typical of the Roman dwelling, and the "Insula" of Ostia. Ostia must have been an im-

house can be disregarded when we consider its close connection with Rome. Only this type of dwelling would permit of the population of Rome, which cannot have been less than a million inhabitants, being housed in the comparatively small area enclosed by the ancient walls. In Rome itself there is evidence of this at S. Giovanni e Paolo, and in the city wall at S. Lorenzo, where walls of Roman houses showing windows similar



FIG. 12.—INSULA DEI DIPINTI. ELEVATION TO VIA DEI DIPINTI



FIG. 13.—INSULA DEI DIPINTI, CASA DI GIOVE E GANIMEDE. ELEVATION TO STREET



to those of Ostia have been incorporated in the later buildings.

Literary evidence further strengthens this theory and the "domus" must be regarded as an exceptional type. It is not adapted to the necessities of every class of the population. It was the rich man's house and its characteristics are maintained only so far as they correspond to the needs of the various classes of the people. A comparison of the two types is interesting. While the "domus" of Pompeii develops horizontally and is lighted internally, the Ostian house develops vertically

street or open space. The houses are three or four storeys high. Each floor was similar in plan and independent of the rest of the house, but served by a common staircase.

Consequently we have a new arrangement of rooms, the disposition of which depends upon the façade, a condition which determines the modern house plan. Thus the result in its general aspect very much resembles a modern block of houses.

Summarised, the chief points of difference of the Ostian houses from the "domus" of Pompeii are :—



FIG. 14.—INSULA DEI DIPINTI. FAÇADE OVERLOOKING OPEN SPACE AT BACK

and is lighted externally. The "domus" is built round the centre court, or atrium, and all the rooms open on to this court, and obtain light from it. Windows are practically unknown on the exterior except for very small openings or slits. All the rooms are on the ground floor, and where staircases occur they lead only to some unimportant rooms, generally in the servants' quarters. This is the type found practically without exception at Pompeii, and although the most recent excavations (opened to the public only in 1924) show these characteristics modified to some extent, the type remains substantially the same. In the Ostian house, on the other hand, the atrium, where it occurs, is a subsidiary feature, and the rooms obtain light from numerous and ample windows overlooking a

1. Vertical development with three or four floors and disposition of rooms similar on each floor and with a continuous roof or floor.

2. Development of the façade on a street or open space instead of round an open court or atrium.

3. Introduction of the block consisting of a number of independent apartments, served by one or more staircases opening directly on to the street.

4. Rooms developed on the façade and lighted by numerous and ample windows in continuous lines.

5. Introduction of passages for easy communication between the streets, generally under the staircases.

6. Independence of each floor and each apartment on each floor.

7. Introduction of balconies on the façade.

## The Royal Commission for Cross River Traffic

The Royal Commission has been sitting since the middle of September at the Royal Court, House of Lords, and has heard a vast amount of evidence. The terms of reference to the Committee were:

To survey the whole problem of cross-river traffic in London; to report what provision should be made to meet future requirements, and, in particular, to consider the proposals made in connection with Waterloo and St. Paul's Bridges. Having regard to the urgency of the question, the report should be completed at the earliest possible date.

The members of the Commission are Lord Lee of Fareham (Chairman), Sir Willoughby Dickinson, Lord Hambleden, Professor Charles Inglis, Sir William Plender and Sir Lawrence Weaver.

On 18 September Lord Crawford gave evidence. He represented a conference of societies which included the Royal Academy, the Royal Institute of British Architects, the Society for the Protection of Ancient Buildings, the London Society, the Town Planning Institute, the Architecture Club, and a conference of engineers. They were, he said, interested in traffic and in the development of London as a whole. They were especially concerned with bridges, from which this subject was inseparable.

### THE EVIDENCE GIVEN BY LORD CRAWFORD BEFORE THE ROYAL COMMISSION ON CROSS RIVER TRAFFIC IN LONDON.

By A. R. POWYS, A.R.I.B.A., SECRETARY TO THE S.P.A.B.

It is no exaggeration to say that of all the evidence submitted to the Royal Commission on Cross River Traffic in London, that given by Lord Crawford was the most convincing and the best presented. Indeed, it is difficult to see on reading it through, even after mature consideration, how it could have been better spoken. The speech was eloquent, was free, was delivered with conviction, was well balanced and no matter of importance was omitted.

In evidence Lord Crawford said:

"Your Commission, Lord Lee, is, in fact, dealing with the greatest problem of re-town-planning in Europe, perhaps in the world, and we are convinced that its solution will largely depend upon the bridge treatment between London Bridge and Westminster, in providing a new avenue of freedom (for it is nothing else) within the most central and important area of the Metropolis. That is the representation I make on behalf of the Conference of Societies."

No architect will dispute this; neither is it likely that any layman will hesitate to agree with Lord Crawford's opinion of the importance of the work to be done by the Commission. There can then be no doubt that the Prime Minister acted rightly in advising the King to appoint the Commission; and this even though its findings may include recommendations that may be opposed to existing Acts of Parliament, to the considered

policy of the London County Council and to conclusions reached by other bodies whose attention has been directed alone to any single one of the problems which come within the embracing terms of the reference under which the Commission acts. Of the evidence given before the Commission, Lord Crawford's alone will be referred to here chiefly because he was speaking for a conference of many Societies and bodies, among which the R.I.B.A. was not by any means the least important. Very much other evidence has been submitted, all of it of great interest. Already the mass of it forms a heavy bulk of printed paper that is well worth close study. There is technical evidence, expert evidence and the expression of public opinion, for none of which we have space even for a slight reference. Our readers must turn to the printed word, and they are advised to do so, if they wish to get within a reasonable distance of understanding this most complex question.

In his evidence Lord Crawford submitted to the Commissioners the answers prepared by the conference to a questionnaire which they had issued. This document may be said to form the basis of the view submitted by the conference, and it is therefore reprinted here.

#### WATERLOO BRIDGE.

*Question 1.*—Is there any danger of the bridge collapsing and blocking the river:

- (a) If partially used as at present, or
- (b) if entirely closed to traffic?

*Reply.*—No danger provided adequate precautions are taken.

*Question 2.*—Is its structural condition beyond repair, or is it practicable from an engineering point of view, to restore its stability and full traffic capacity by underpinning or other methods?

*Reply.*—Stability and full traffic capacity can be restored.

*Question 3.*—If the present bridge should have to be removed and not replaced:

- (a) How long would the operation take?
- (b) How much would it cost?
- (c) To what extent would water-borne traffic be interfered with during the progress of the work?

*Reply.*—(a) Three to four years.

(b) Perhaps £500,000 with proper consideration of river traffic.

(c) In any case water-borne traffic must be impeded to some extent.

*Question 4.*—If restoration of the existing bridge should be found practicable:

- (a) How long would the work take?
- (b) How much would it cost?
- (c) To what extent would water-borne traffic be interfered with during the progress of the work?

(d) If it should be found practicable to rehabilitate the weakened piers of Waterloo Bridge (by underpinning or otherwise) would the distorted arches have to be taken down and rebuilt?

If so, can any estimate be formed of the time and cost of the necessary works?

*Reply.*—(a) Two to three years.

(b) £650,000 to £750,000.

(c) Much less than under any scheme of removal and replacement.



(d) Most desirable, but from an engineering point of view not essential. Estimates of time and cost are included in the maxima of 4 (a) and 4 (b).

**Question 5.**—If it should become necessary to demolish the existing bridge and to rebuild it (to the same design) in the same position, for how long would it have to be closed?

(a) How long would the work take?

(b) How much would it cost?

(c) To what extent would water-borne traffic be interfered with during the progress of the work?

(d) Could the present temporary bridge continue in full use throughout such period?

**Reply.**—(a) Six to eight years.

(b) From £1,000,000 to £1,300,000.

(c) For five years at least certain of the arches would be impassable by river traffic.

(d) Presumed that this is the case.

**Question 6.**—Would any increase of the traffic capacity of the existing bridge (if restored) be practicable without spoiling or materially interfering with Rennie's design?

**Reply.**—No.

**Question 7.**—(a) If the capacity of Waterloo Bridge should be materially enlarged (either by rebuilding or by restoration) would the present approaches and contiguous thoroughfares be able to accommodate the increased volume of traffic?

(b) If the traffic capacity should be increased from three lines (as at present) to four, how would congestion of the approaches be affected?

**Reply.**—(a) No.

(b) Widening bridge will not necessarily attract increased traffic. If it does, increased congestion in the Strand will ensue.

**Question 8.**—If the existing bridge should be restored, or rebuilt to the original design, and if it should be found desirable for general traffic reasons to make it a "one way" bridge, would its present dimensions be adequate for the anticipated volume of such traffic?

**Reply.**—Yes.

**Question 9.**—Did the existing bridge (before it became damaged) seriously impede water-borne traffic, and to what extent has the erection of the temporary bridge increased the difficulties of navigation?

**Reply.**—No evidence has been recorded of more accidents here than elsewhere. Obviously temporary bridge has increased difficulty of navigation.

**Question 10.**—It is alleged that a widening of the existing bridge (by 12 feet) would render navigation practically impossible. Is this statement well founded or capable of demonstration?

**Reply.**—Such widening undesirable quite apart from effect on river traffic.

**Question 11.**—If the roadway of Waterloo Bridge were widened by 5 feet it would apparently accommodate four lines of traffic, as compared with three at present. Would such a limited amount of widening, if involving the piers also, constitute any additional or appreciable handicap to navigation?

**Reply.**—Such widening undesirable quite apart from effect on river traffic.

# ST. PAUL'S BRIDGE.

**Question 1.**—What is the main case for the erection of a new bridge on the proposed line, and, in particular, what main traffic routes between North and South London would it be expected to serve and relieve?

No answer.

**Question 2.**—It is understood that one of the main arguments for the erection of St. Paul's Bridge is that it would provide much needed relief for London Bridge, which is at present overworked. Would not such relief involve a very wide diversion of traffic, and how could this be effected?

**Reply.**—London Bridge is not seriously overworked. Difficulty only lies in its approaches. Still greater difficulty would be encountered by a bridge at St. Paul's, and would therefore provide no adequate relief for London Bridge except at prohibitive cost. All traffic delivered by St. Paul's Bridge would have to cross the East and West routes at Cannon Street and Cheapside. These routes are already overcharged, and another across them would gravely accentuate traffic congestion at this point.

**Question 3.**—Southwark Bridge is said to be used at present far below its capacity. Would it be practicable, by a diversion of traffic and by improvement of its approaches, to bring this bridge into fuller use, and thus to relieve London Bridge to a corresponding extent?

**Reply.**—Southwark Bridge, being adjacent to London Bridge, is better calculated to provide relief than a new St. Paul's Bridge, but the difficulty of the creation of direct approaches on the north bank is great.

**Question 4.**—Can any (approximate) estimate be formed of the comparative costs and expenditure of time involved in—

(a) Constructing the new St. Paul's Bridge and providing it with adequate approaches?

(b) Improving the northern approach to Southwark Bridge (including the gradient of Queen Street)?

**Reply.**—We are not in the position to furnish estimates, but we wish to point out that the Corporation of London (Bridges) Act, 1911, does not provide for approaches which will be required North of Cheapside and South of Southwark Street.

**Question 5.**—Objection has been offered to the proposed St. Paul's Bridge on the ground that the increased volume of traffic over its northern approach would endanger the stability of St. Paul's Cathedral. Is this objection well founded?

**Reply.**—Considering the dangerous condition of St. Paul's Cathedral all risk of increased vibration should be avoided.

**Question 6.**—(a) Would the proposed St. Paul's Bridge, if constructed (or during its construction), constitute any serious additional obstacle to navigation up and down the river?

(b) Are its dimensions, as designed, those best calculated to hinder navigation as little as possible?

**Reply.**—We assume that the interests of navigation were adequately considered by the designers of the bridge, but in the opinion of the Conference no bridge at this point is necessary.

Lord Crawford opened his evidence with the following sentence:

"This Conference is especially interested in bridges, but likewise in the development of London as a whole. That subject is inseparable from bridges, and this is the first occasion in history upon which this matter of London bridges as a unit has been dealt with comprehensively; we therefore look upon the appointment of your Commission as a new factor of the greatest importance, which for the first time enables the whole problem of London bridges to be reviewed as a unit."

He went on to explain why the Conference welcomed the Commission, and in doing so referred to the various authorities which without proper co-ordination were responsible for the provision and maintenance of Cross River Traffic.

"One of the authorities is the Underground Railway, another is the Southern Railway, a third is the City of London, and the fourth is the London County Council. Now this piecemeal treatment is not in the very least the fault of the London County Council or of the Corporation. The London County Council jurisdiction only extends a few miles from Charing Cross; it does not touch Chiswick or Mortlake, on the river there; or West Ham at the other

end of London ; it does not even control central London, because the City is in charge of nearly a mile and a half on the northern bank. It is the facts of London government which have isolated portions of the river, and that isolates everything that a bridge involves. It is Parliament, I suppose, which has imposed this situation on the Metropolis. Now we hope to argue all these bridges as a unit before you, on the ground that they are allied in finance, in traffic, in town planning, even in engineering. Hitherto they have been treated as different portions of different questions, whereas we look upon them as different portions of the same question. We place the highest importance upon the provision of a new bridge at Charing Cross ; we look upon that as the key to a solution of many of our traffic difficulties ; the key to the access to great areas of South London, hundreds of acres almost, and very central as regards the Metropolis—very central.”

It was natural in the circumstances that the greater part of the evidence submitted by Lord Crawford should have special reference to one existing and two proposed bridges, namely, to Waterloo Bridge and to the suggested bridges near St. Paul's and at Charing Cross. It was inevitable in these circumstances that the evidence fell into two parts, the first referring to Waterloo and Charing Cross bridges and the second to the proposed St. Paul's Bridge.

After referring to the recent reports by Sir Henry Maybury and the London Traffic Committee, saying it is conceded by the Ministry of Transport in the first place, and by the London Traffic Committee, that “with Waterloo Bridge restored to its present dimensions, traffic requirements would be amply met for the next twenty-five or thirty years, given a new bridge at Charing Cross.”

Lord Crawford added :

“That is really self-evident, but in my opinion it both understates the necessity for a new Charing Cross Bridge and understates the longevity of Waterloo Bridge.”

And he went on to say :

“We are justified, we think, in asking the Commission to recommend London to retain what we now possess, and to concentrate funds and energy on the great central need at Charing Cross. We want to strengthen Waterloo, and you will hear arguments that it can meet requirements at its present breadth. The failure of the bridge is said to be due to age and to the stress of traffic. The argument, of course, is faulty, the logic is faulty. All the arches of the bridge are identical in age, and yet in 100 years No. 1 arch has sunk 0·6 of an inch, whereas No. 4 arch has sunk 28 inches and more. The argument of age clearly is not adequate. Equally that it is stress of traffic cannot be substantiated. All the arches, every arch, is submitted to the same stress of traffic, but No. 4 has sunk fifty times as much as No. 1. Here may I say, Lord Lee, that I listened yesterday, with some surprise, to the statement made by Mr. Mott (I do not know if Mr. Mott is here), that the piers of Waterloo Bridge are in a shattered condition. Well, of course he did not mean to apply that to all the piers, though the phrase suggested that. Nobody could dream of saying that all the piers of Waterloo Bridge are in a shattered condition. But in spite of scour and subsidence, the witnesses upon whom I rely will

argue that the condition of the bridge to-day is remarkably good. What is the true test of a pier being in a shattered condition ? The courses of the masonry of these piers are to-day horizontal. They have maintained their original alignment as set out by Rennie. That is the real test of stability.”

Lord Crawford did not neglect to use the arguments and the actions of the authorities responsible for Waterloo Bridge against themselves. He pointed out that they did not hesitate to use the bridge as a factory for assembling the heavy steel girder which forms the large span of the temporary bridge ; he reminded the Commission that the whole weight of the steel span was for a time supported entirely on the cutwater which these authorities deemed had completely failed. He went on to refer to the quality of the granite used in these words :

“Now as to the granite and as to the material of which the bridge is made. Mr. Wilson, an engineer who has made a particular study of strengths and resistances of stone, will offer evidence as to the actual quality of the stonework.”

We shall argue, and we hope prove by our crushing tests, that the samples are more than adequate to carry the stresses imposed upon them. There never would have been a suggestion to destroy this bridge if it had not been for the effect of scour.”

Having dealt with this point, Lord Crawford continued with reference to the causes of the sinking in the piers, explaining how the scour of the river was the source of the trouble, and pointing out why this had so much increased since Rennie's day. He went into close detail when he referred to the means by which the bridge could be maintained, explaining in a manner which any layman would understand how the foundations could be strengthened to effect this. He made it clear that the engineers who had been engaged by the Society for the Protection of Ancient Buildings gave advice according to their convictions and that they were prepared to modify their conclusions should new information make that desirable. He said :

“Please let me make this clear, that these engineers who are all experts, are quite prepared to consider arguments that such and such a depth of foundation should be modified or that such and such a treatment of the superstructure is desirable ; there is no *parti pris* ; all they are out to do is to produce the most economical, the safest and the best conservative scheme for the bridge, and if the Commission have any doubt they obviously can ask contractors for their opinion ; a very short period, considering the amount of available data, would suffice.”

But Lord Crawford is too wise a man to over-emphasise one side of a question. He quickly turned from the structural to the traffic problem. He said :

“Now as to the traffic. The proposed widening of Waterloo Bridge seems to assume, apart of course from the technical question of underpinning, that this is a bridge problem. There is no real bridge problem in London but there are many approach problems. Putney Bridge we hear is to be widened. It is no earthly use widening Putney Bridge unless you revolutionise its tiresome approaches. It is scarcely an exaggeration to say that if the bridgeheads were free, two-line bridges could almost



meet requirements. The reason is simple ; it is because no vehicle stops on a bridge or picks up or sets down on a bridge ; no vehicle turns on a bridge ; it is not impeded by cross-traffic, either pedestrian or vehicular, and that is why there is never a policeman on duty on a bridge. That, again, is why there is surplus space, reserve traffic capacity on all these bridges."

He went on to point out that it is not statistics of traffic on the bridges that is needed nearly so much as the statistics for the approach roads. "That," he said, "is the thing that matters."

He went over all the arguments which had been used in the attempt to prove that a wider bridge was needed where Waterloo Bridge now stands, and laid a good foundation for the technical experts who were to follow him in showing that to spend money in getting more cross river roadway here would be to spend it wastefully. He claimed that the money that is available should be devoted to a new bridge at Charing Cross, but before coming fully to the arguments for this he gave some time to considering the claims made for building a new bridge near St. Paul's Cathedral.

About this he said :

"The promoters of the St. Paul's Bridge Bill can never have quite made up their minds whether they wanted the bridge for through traffic or local traffic, or else, if they tried to combine both objectives, their compromise will fail to attain either.

They say : "We have got money ; let us build a bridge with it." They do not ask what the traffic justification is, or how they are going to use the bridge. On the Surrey bank it is only 270 yards from Southwark Bridge ; it joins Southwark Bridge approach 400 yards from the river bank at Southwark Street. There are fifty yards or thereabouts between those two bridge heads. That makes a very poor corner. If traffic existed to justify these twin bridges, you would create and new and serious focus of congestion at that point. But Southwark Bridge is notorious for the paucity and the rarity of its traffic. Sir Henry Maybury says, "I see no possibility of making it more attractive." He says, "The bridge is extremely disappointing." Beneath these mild and measured words we can read that the bridge is a perfectly hopeless, irredeemable failure. It really is an astonishing spectacle of calm and of solitude in the midst of the busy world of the City. Is St. Paul's Bridge going to be more serviceable ? Is it going to make Southwark Bridge even more desolate ? Does Southwark Bridge really require a by-pass ? That is what St. Paul's Bridge is going to be.

Now, if the City Corporation had been the sole bridge authority for London, it is unlikely that they would have constructed a bridge where Southwark Bridge now is ; till less would they now recommend a second bridge cheek by jowl to it. If money has got to be spent in the City, it might be devoted to making Southwark Bridge serviceable by providing approaches ; but the real need of London lies elsewhere. As things are the hands of the City are tied ; they operate under limiting statutes and trusts ; their difficulties in a way are analogous with those of the London County Council. I very much sympathise with both these great public authorities in the difficulties they have to surmount. I hope I shall not be considered

disrespectful in saying that I wish the City would take the initiative in coming to the rescue of Greater London."

Finally, Lord Crawford ceased from criticising the proposals of the various individual authorities and turned to constructive suggestions. But the word "criticism" must not be taken to suggest that Lord Crawford spoke with any animus, for, whatever his feelings in the matter may have been, his argument was courteous, studiously detached, one might almost say planetary, the reasoning was so disinterested. When he did turn to a constructive policy it was to advocate the building of a new wide bridge at Charing Cross. He said :

"What we want really is an outlet southwards via Charing Cross ; that would help Waterloo traffic ; that would help Westminster traffic—all the traffic which most conveniently comes down via St. James's Street, the Haymarket, and Trafalgar Square. Charing Cross Bridge would relieve Wellington Street blockade ; it would ease this bridge here, and widening Waterloo Bridge will not make Charing Cross unnecessary. People are generally agreed that if a bridge were built at Charing Cross and Waterloo Bridge repaired at its present width, traffic requirements could be met for thirty years ; I think for very much longer. But all this time Charing Cross is crying for relief ; that is where relief will be most fruitful ; that is where it is most wanted. Everything turns and hinges upon Charing Cross.

Charing Cross Bridge is the supreme need of London, and we say this even if more passenger traffic is carried underneath the river. A further advantage from our point of view would be that it would save Waterloo Bridge. We should avoid the risk to St. Paul's Cathedral and any creation of fresh City congestion at St. Paul's."

After Lord Crawford had finished giving his evidence he answered questions put to him by Lord Lee, the chairman of the Commission, and left the witness chair to the engineers who through the S.P.A.B. have been advising the Conference of Societies.

### THE PROPOSED ST. PAUL'S BRIDGE.

#### PROOF OF EVIDENCE OF MR. ARTHUR KEEN.

Mr. Arthur Keen, Vice-President R.I.B.A. and Chairman of the Conference of Societies on whose behalf Lord Crawford gave evidence on 18 September, appeared before the Commission on 5 October. His Proof of Evidence was as follows :—

I have read the Proof of Evidence of Sir Banister Fletcher, who is a member of our Conference, and it conveys the views of the Conference except in matters relating particularly to the City which are outside our scope.

I wish to speak especially about St. Paul's Cathedral, both in relation to its structure and to maintaining the dignity of the most important building, with perhaps one exception, that we possess.

It is difficult to ascertain what is actually wrong with the fabric ; opinions of those who have studied it very carefully differ very much ; but the masonry of it is full of cracks and settlements, and in the case of Waterloo Bridge cracks of far less significance are held to show that the piers are "shattered," and must be taken down and rebuilt, even though the bridge is one of the finest examples of masonry in the kingdom. In the case

of St. Paul's the defect is being remedied by injecting cement into the interstices and inserting metal bars. Presumably this is found sufficient to insure stability, but the difference of view in the two cases is very disquieting, and certainly we are free to form our own judgment where authorities differ very much. I have had two opportunities given to me of seeing from the scaffolding what is happening to the piers of St. Paul's. The Cathedral was built in great part of old stones saved from the mediæval cathedral, used as rubble stone and faced with dressed Portland stone. The result of this is unequal resistance to strain, and the facing stone has come under enormous pressure. I have seen places where it has spalled off in great pieces two or three inches and more in thickness. I have seen numberless places where such defects have been repaired with new stone, and many places where the stone is found to be hollow at the back and ready to come away. The quantity of cement that is being used is clear indication of the extent of the cracks and voids in the masonry. In our view this is a condition of things in which vibration is a great danger, and we regard it as a very serious thing that a stream of heavy traffic should be brought against the east end of the Cathedral—a definite danger. Mr. Davidge pointed out to your Commission that vibration operates in unexpected ways, and is, in fact, not very well understood. It is a curious fact that when Piccadilly Tube was formed, vibration was felt at the backs of the houses rather than at the front, although the backs were more distant from the tunnels. In a letter to the *Times* of 24 April 1924, Mr. G. W. Cobbe, who made borings in the soil under the Cathedral, deals with this question, and I attach a copy for the use of the Commission. I am aware that it is proposed to have a footpath 15 ft. in width against the east boundary of the Cathedral, but such a space as this is scarcely worth discussing. The ideal should be something approaching to a Cathedral Close. The traffic about the Cathedral has increased so greatly in volume and weight that out utmost effort should be directed to securing an abatement of it, if possible, and certainly to preventing any further extension.

I am familiar with the road that runs north from the Cathedral: Aldersgate Street and onwards through Islington, Holloway and Highgate to Barnet and the North. The traffic on this road has increased enormously in recent years; it is in very great part heavy traffic, and I can see no chance whatever of anything but continued increase. To bring this traffic to St. Paul's Cathedral would, in our view, cause immediate and ever-increasing danger to the Cathedral. I believe that the time will come very soon when the police will have to control traffic far more than at present, and there are two points on this road where traffic could well be diverted to a bridge at Charing Cross in order to by-pass the City altogether. The first point is at the Archway Tavern, at Highgate, where Junction Road runs off through Kentish Town directly to Charing Cross, and the second is at the Nag's Head, Holloway, where Parkhurst Road forms the continuation of Seven Sisters Road, which in turn comes from Herts and Essex. Parkhurst Road joins up at Camden Town with the road from Highgate

to Charing Cross. From the Archway Tavern to St. George's Circus, in South London, it is exactly the same distance by this route over a Charing Cross bridge as by Aldersgate Street and a St. Paul's Bridge. I think one route is as good as the other for general traffic purposes. (The distance is five and a half miles.) In a similar way traffic to the South-east could be drained away at Highbury by the New North Road and Hoxton to the Minories and Tower Bridge. In this way the need for a bridge at St. Paul's would be met to an extent.

I am asked to speak very emphatically about the architectural aspect of the matter. It is so important that I submit that the traffic question cannot be settled without reference to it. There is no question about the hold that St. Paul's Cathedral has on the imagination of the public generally; recent history shows this plainly. It is appreciated as a very noble building by all, and its position in relation to the national history and life seems to be clearly understood. What is not so clearly understood is that the setting of a building is almost as important as the building itself. It has the same relation to a building as the frame has to a picture: adding to or detracting from its effect and completeness. Durham Cathedral with College Green made into a football ground would lose a great part of the serene dignity that, more than anything else about it, impresses us, and precisely the same argument applies to St. Paul's. There is nothing fanciful or merely sentimental about this; it is a definite fact that lies at the root of architectural design—the sense of fitness. If a building is valuable for its beauty it is mere folly to injure it by vulgar or unfit surroundings, or by heavy and noisy traffic; and one is surprised that the City authorities, mindful as they are of the amenity of the City, should seem indifferent in this matter. Reference has already been made by Lord Crawford to the way in which the proposed bridge ignores St. Paul's Cathedral; refuses the axial lines; shirks it, in fact. The line of road as planned, will be aimless and lop-sided; the building developments which will follow the construction of the bridge and its approaches will have no relation in design to the Cathedral, and presumably no subordination to it. The scale of the Cathedral may suffer immeasurably by the proximity of towering structures of unsuitable design.

The surroundings of St. Paul's, as we know them at present, are haphazard and casual, but not especially aggressive in point of height. At any time the whole aspect of them may be changed, and great injury caused to views of the Cathedral, which at present possesses extraordinary beauty and grandeur.

Wren planned for a generous provision of space about the Cathedral, and order and distinction in the arrangement of it. This space could not be given and we cannot point to anything that has been done in this age towards attaining Wren's ideal; the present Act gives no power of controlling the buildings that may be erected on the east of the Cathedral if the block of buildings next to Old Change is removed, and gather that even this, including itself, is not assured.

It is not merely the concern of the Dean and Chapter as the constituted guardians of the building; the public



interest is concerned in securing and safeguarding in every way a very great national possession. Using words similar to those applied by Mr. Norman to Waterloo Bridge, I would say: "if it be possible by any means" to secure so beautiful and famous a public monument from injury by adopting other means of transit, it is our duty to adopt such other means.

#### THE PROPOSED ST. PAUL'S BRIDGE.

##### SIR BANISTER FLETCHER'S EVIDENCE.

On 5 October Sir Banister Fletcher, Vice-President R.I.B.A. and a Member of the Court of Common Council, represented the views of the members of the Common Council who are in opposition to the proposed Bridge.

His objections summarised are as follows:

- (1) Town planning and traffic objections.
- (2) Financial objections.
- (3) Æsthetic objections.
- (4) St. Paul's Cathedral.

Under No. 1 heading. He said that the bridge was not proved to be necessary, and that it would drive a wedge through the trade of the City which would do incalculable harm; that it would provide a corridor right through the heart of the City, and would be intended to attract north and south traffic, which does not belong to the City, in order that such traffic may take a short cut from south to north London, which would be contrary to the principles of all town planning authorities, and to those carried out by the Ministry of Transport, for, throughout the country on all main roads "by-passes" are being made to carry traffic round the towns and not through them. The proper method of relieving north-south traffic would be by way of Blackfriars Bridge, the Tower Bridge and Vauxhall Bridge, all of which, according to Sir Henry Maybury, were not carrying their full capacity.

After dealing with the financial objections (No. 2) Sir

Banister dealt with the aesthetic objections (No. 3), pointing out that the proposed bridge over Upper Thames Street and Queen Victoria Street, connected by some fifty vaulted tunnels—some measuring 30 feet high and 65 feet long, would result in a second insanitary area of the City—*i.e.*, a veritable slum similar to that of the viaduct from St. Paul's Station to Holborn Viaduct Station. The new scheme would spoil the eastern end of Queen Victoria Street, which probably forms the most imposing entrance into the City of London. The iron bridges over Upper Thames Street and Queen Victoria Street as designed, resemble the existing iron bridge by St. Paul's Station, and are hideous, with no architectural expression.

No. 4, St. Paul's Cathedral, Sir Banister said the most vital of all objections were the possible and unknown risk to St. Paul's. The Cathedral authorities, including Mr. Mervyn Macartney, the surveyor to the Cathedral fabric, contended that the underground work for the substructures in connection with roads and viaducts, right up to St. Paul's Churchyard would threaten the foundation of the Cathedral by tending to drain off the water under the "pot-earth" on which the Cathedral stands, and thus cause disturbance or subsidence. The possible danger to Wren's great masterpiece was so insidious, hidden and incalculable in extent that we should definitely refuse to run such a serious risk, so long as there was a substantial amount of expert opinion against thus incurring such responsibility for the future of the Metropolitan Cathedral. . . . The proposal of Sir Henry Maybury to form a "circus" at St. Paul's Cathedral would probably involve the demolition of buildings on the north side of the Cathedral, and would mean that the Cathedral would be encircled with heavy traffic, an appalling suggestion.

The Royal Fine Art Commission had moreover unanimously pronounced against the scheme.

# Elements of Design & the Teaching of Building Construction

CONFERENCE OF TEACHERS AT THE R.I.B.A. 21 JULY 1926.

BY PROFESSOR A. E. RICHARDSON [F.]

## I. THE ATTITUDE OF THE TEACHER.

**N**EVER at any time in history has there been such need for revision of theories of building. Architects and teachers especially are fast losing control of the wider issues of architecture. This truth, all the more serious in view of increased educational facilities, demands investigation.

Putting aside all predilections for the masterpieces of the past, of the integrity of which we are in agreement, there remains the adjustment of the technical side of building to the conditions of the moment and the future. We will not waste time discussing the merits of style, nor argue about points which are controversial and have no definite bearing on the subject before us.

Building can be classified under three groupings; these are respectively civic, domestic, and ecclesiastic. At present most buildings are either one or the other of two things: (a) copybook studies of old work, (b) masses of material crudely arranged. There is very little fine building.

To meet the difficulties of combining art with science those who have specialised in the theory of construction have collected data relevant to known forms of construction, the idea presumably being to record the minor components used in building practice, as well as to offer precedents on a generous scale. We have, therefore, the spectacle of a mock system of architectural style totally unrelated to the system of construction now in vogue. It is not going too far to say that architecture to-day does not express the realities which surround us; it is non-vital in the sense that it lacks anatomy; it is decoration held in place by construction that is purely adventitious. Put briefly, constructors have been obsessed with the idea of providing a universal system of construction.

There are signs that the old order of things is being slowly relegated in favour of methods which are more logical. It is becoming clear that construction must be taught as a branch of science intimately related to art. It is indivisible from art.

The architectural stylist begins with a pictorial conception of the building he is called upon to design; he fits a plan to his picture and proceeds to the details of construction. The result is far from convincing. It is only fair to say that some extraordinarily good buildings have resulted from such copybook methods. But at best this procedure is style exploitation.

Fine building, on the other hand, belongs to a different category. In the first place, it demands that

all the parts of a fabric are sequential and harmonious. Because the plan has structural anatomy, the sections and the elevations are in sympathy. Under this system the attributes of construction, always subordinate to the building as a whole, are inherent in the volume of the spaces, as they are in the disposition of the walls. The building becomes reasonable in its expression by virtue of the requirements and their adjustment to a distinguished sense of structural art. You will observe that selected style has not been mentioned; neither has construction been referred to except as a subordinate issue. It is not possible within the time at our disposal to do more than discuss one phase of the subject. If we deal this afternoon with domestic architecture alone, we shall gain a view-point which must lead to a proper estimation of the other branches into which architecture or building is divided.

There has been a considerable advance in recent years, particularly in the development of houses for the people. We have the evidence of the Government housing schemes, of such communal centres as Welwyn, Dormantown, and other places. The standard of living has improved, comforts have increased. But the advancement, good as it is in some particulars, has been accompanied by horrors which threaten the amenities of the countryside. Shoddy construction and false economy have, in the main, been responsible for the retrograde movement.

We are living in an age when the true principles of building, save at the hands of a few architects, are almost totally ignored. The good work is overshadowed by growths which are pernicious and distressing. The task before the teacher is an enormous one. How, for example, is common building to be controlled? Is it within the power of a few individuals to reinstate a building vernacular which will be honest and pleasing in its varied expressions?

We are up against the demon of snobbery and the devil of unrest. The mass of the people do not understand tidiness. They are opposed to restraint and simplicity. The old England of our forefathers is being subjected to indignities which spell ruin, and no amount of loose art talk will stem the tide.

But you have not come here to listen to a jeremiad. The first suggestion to be made is the immediate need to improve existing methods of teaching construction.

No matter from what class the students are drawn, the best results can be achieved by relating the theories of construction to actual building schemes. There should be a closer reference to plans. Not only should



students be encouraged to a knowledge of bricks, timber, tiles, and masonry, but examples of contemporary planning should be taken as illustrations of building practice at its best. Every school should have a set of architects' plans for reference. There should be exercises in assembling masses of materials. Lectures should be given on the right way to treat finishings, and these talks might be accompanied by illustrations of examples of building which in every respect were beyond reproach. These methods have been followed at the Central School of Arts and Crafts with good results. This first point might be summed up as the fulfilment of the theory of construction—namely, cause and effect.

## II. THE OBSERVANCE OF REGIONAL CHARACTERISTICS.

There are teachers in this room from every part of the country. Most people are aware that every county in England during the past four hundred years has evolved building traits, especially in domestic work, which are purely local. In other words, the right use of local materials has produced a vernacular suited to the district. The railway upset this pleasant evolution, and that which the railway left unspoiled is now endangered by the employment of substitute materials.

The use of local materials must be more closely observed. In this the past offers many lessons. There is no reason to be slavish and to indulge in copybook exercises. The broad principles alone need consideration. It is unfortunate that the ordinary treatise on construction ignores such essentials.

## III. THE LOGIC OF STRUCTURAL PLANNING.

The plan is the determining factor in teaching the elements of design and construction. It has been argued that we know everything that is to be known about structure. But do we? There is so much crude building as to cause doubt. If teachers of construction go about their several tasks in the right way, they will lead their men to think of planning and construction as providing the very fibres of fine building. Let them begin with simple exercises, constructing circles, squares, and octagonal forms in brick, stone, or timber. Let the student follow on by roofing these geometrical figures and so proceed to combinations of forms. If a student plans and details the construction of one small house during his term of studies, he will have gained a better idea of the theory of building than another who prepares an endless number of plates of constructional details. Here, again, lectures on the great buildings of the past, describing the anatomy of the plans, will be of the utmost value.

## IV. FINE BUILDING.

The aim of teaching construction is not wholly achieved if the issue of distinguished building is ignored. Do not run away with the idea that this term implies grandiose architecture. Remember we are discussing

domestic work. By fine building is meant work which is humane, orderly, reasonable, and economical. How often is a wall considered merely as a wall, a window as a glazed opening, a doorway as an entrance, without regard to the grouping of these parts or their relationship the one to the other? Ornament, bay windows, top-heavy chimney caps, and awkward roofs do not make for finesse in building. Neither could we consider plate glass, glazed brickwork, or Welsh tiles out of their proper environment. There is no better illustration of crude building than that offered by the advertisement page of the *Evening News*, which on occasions reveals a hundred crude cuts of hideous bungalows and treacherous houses for the enticement of the unsuspecting.

## V. GROUPING AND AMENITIES.

Teachers of construction must not consider their duties complete unless attention is given to the elementary principles of grouping. Every teacher should be a town planner. His conception of the structural system should apply to the arrangement of houses in groups. He should preach to his men, who will be builders in the future, urging the necessity of building on sites away from main roads leading into towns. He should dwell on the importance of preserving local landmarks, and should encourage his men to regard the grouping of houses and cottages as a high moral responsibility. This idea is capable of many interpretations. It is part of the theory of design and construction. It has been successfully pursued by municipal authorities and private owners. But notwithstanding good examples, as far as legislation goes to-day, the most beautiful spot in the country is at the mercy of any carpenter or amateur builder who is bent on emulating a design from one of the current technical papers.

## VI. PRIDE AND SIMPLICITY.

The question of snobbery has already been touched upon. People like to imitate that section of the social strata which they consider immediately above them. Thus the wife of the clerk likes a bay window because the bank manager's wife has a bow window. Hence houses with bay windows facing one another, the endless gable rows, the absurd railings and the insanitary front garden. When, as at Welwyn, the houses are kept simple it is not the artisan who looks upon the result with favour, but the highbrow fraternity. How different things were a hundred years since! Then there were few ugly cottages. You will begin to agree that design and construction include the consideration of pride. We desire building, as a structural art, to level things up, not to degrade things to a common level. Many a shoddy nest of cottages recently erected in every county is foredoomed to become a country slum within the

next decade or so. People have no real pride in shoddy building.

#### VII. THE VALUE OF THE EXTERNAL QUALITIES OF OLD WORK AS A GUIDE TO MODERN EXPRESSION.

The eye is the small circle that takes in effects. We receive many impressions subconsciously. It is clear that whether we acknowledge our indebtedness to the past or not, we are continually being influenced by its internal evidence. The danger is that some fall in love with the past to such an extent that they become Mediævalists or Georgians. Then we have artists skilled in faking and reproducing. In some ways architectural practice to-day is strangely akin to the trade which flourishes in the Tottenham Court Road and elsewhere. There are others who are blind to the past. They have no idea of its values, of the pale tints which pass for commonplaces, of the minutiae of history which colour the intricate tapestry. Ruskin once made an illuminating contribution to architectural theory—at least it was one of the few that reached down to our level. Referring to the plain stone houses of the Lake District, he said these belong to the true spirit of architecture. Old buildings exactly reflect the tendencies of the age in which they were produced. They carry the assay mark of Gothic, Tudor, or Classic. We are prone to admire them for their architectural character alone. But investigation proves the treatment of the material, the pitch of the roof, the weathering of the eaves, the local treatment of detail, to be of a more lasting order than the twirls and conceits of style. I am not going so far as to say that style does not blend with regional traits. The point I wish to make is that regional traits are superior to acquired style. Therefore the treatment of material in masses offers a constant which never becomes old-fashioned.

#### VIII. CRAFTSMANSHIP AND THE MACHINE.

A hundred years since craftsmanship was general. Miscellaneous Birmingham goods, in spite of Messrs. Boulton and Watt, evidenced skill. Craftsmanship being common, few troubled themselves about it. Good work was expected from every workman. Most things were produced by hand.

The art of the Victorian age represented the gradual decay of the small craftsman. By the year 1851 the machine had gained the victory. Then followed the isolated efforts of Ruskin, William Morris, Philip Webb, and others to revive handicraft. You can have good craftsmanship to-day if you are prepared to pay for it, just as you can obtain rare fruits out of season. The newer craftsmanship belongs to the machine. It is precise in its parts and has a rigidity of expression in sympathy with this age. We have to admit the machine, and that means the suppression of the individual. Between the architect, with his drawing board learning, and the machine

with its smoothing capacities, building in some manifestations has the quality of starched linen. Mr. Spooner, however, has shown us that joinery can be produced to-day the equal of antique work. It is still possible to get splendid bricks, and the treatment of stone is still understood. Allowance must be made for the vast scale on which building is undertaken to-day. Teachers must explain the difficulties to their students and tell them that building does not finish with the drawing board. My advice to you is, in spite of the machine, do not let your regard for craftsmanship die out. The men who work on buildings need gingering up. It would be a little unusual for an architect to-day to assemble the workmen and explain his building to them, and to ask for their co-operation in every part. But this, you will agree, is what is wanted.

#### IX. STANDARDISATION OF DETAIL.

Contrary to expectation, this is a good quality. All the great periods of building have been noted for the uniformity as well as the excellence of the detail.

If we study the 18th century, early, middle or late, we shall find the joinery of each period standardised. The six-panelled door introduced by Inigo Jones remained as a constant form of design from the time of Charles the Second to the middle of the 19th century.

Joinery of standardised design was at its best at the end of the 18th century. I have never seen better joinery than that worked for Sir John Soane and Henry Holland. Standardisation as a principle admits of varieties which give piquancy and individuality. Now is it not strange that most books on construction avoid this issue? Some of the early editions of Rivington were fuller in this respect. Some writers on the subject of construction have been so eager to meet current fashion that they have evolved a system foreign to the best principles of building. Their views are polyglot. Here I know I am on very dangerous ground.

#### X. REPRODUCTION OF PERIOD WORK TO BE AVOIDED.

This point has already been partially dealt with. Construction does provide a key for advancing the character of joinery, masonry and brickwork, as it does for design in general. Essentially is this the case when the modern conditions of planning are observed. "You are not debarred from studying old work, but don't stage it; otherwise we must all dress in costume."

#### XI. THE REVIVAL OF THE APPRENTICESHIP SYSTEM.

No trade can expect to flourish without a constant supply of recruits. The building industry, the oldest in the world, takes in by far the greatest number of unskilled people. Guilds, polytechnics and other teaching centres in large towns have done much to remedy the evil. In the remote country districts the



apprenticeship system has almost died out, with the result that the stream of young artificers who formerly came into large towns for work has practically ceased. Boys prefer to become fourth-rate clerks or shop assistants rather than lose esteem by learning a trade. Teachers of construction have it in their power not only to train men in the subject of construction, but to advise on the nature of a calling. A boy equipped with theoretical knowledge will make a better artificer if he combines his school work with the handling of tools. Here is a point worthy of the attention of the T.U.C.

## XII. THE SOCIAL ASPECT.

If building generally was good when the population consisted of 12 millions, why does it fail to please when the population is 40 millions? Here is a subject for the Institute Essay Medal. I do not pretend to be in a position to answer the question.

If we could succeed in leading opinion to a fit sense of what good building is, this country would in every way be better.

The standards of living have changed: people are well dressed to-day. It is hard to distinguish the shop girl from the lady of fashion. It is rare to find youths in town or country without respect for their appearance on Sundays. But the standards that apply to an appreciation of clothes are not considered when houses are in question. During the last decade there has been a notable advance in design where the building of new houses has been controlled by expert advice. But we have been faced with an evil as bad as the efforts of the speculative builder a quarter of a century since. You will at once think of the small cottages and bungalows in your districts. What a reproach to our so-called civilisation such things are!

## XIII. CO-OPERATION OF BUILDING AND FINANCIAL INTERESTS.

Regarding small property, collective effort was to be preferred to individual enterprise. The old system which permitted a carpenter working with a fourth-rate solicitor to become a man of property was not extinguished by the war. It is true we do not suffer quite so acutely from catalogue building, but on the other hand the rise of cost has brought forth other evils which are just as bad. Builders to-day are not prepared to build houses for wise men to live in. Municipal enterprise is a good thing. The example of the London County Council is to be admired. People are so busy looking after their daily bread that they are forced to let others think for them in all questions of housing. The main issue is the control of designs. I submit that the local authority, often advised by local surveyors and engineers, does not fulfil all the obligations required. The drainage may be good, but the pictorial effect is anathema. Although you may control taste by training workmen, you

cannot entirely influence public freedom, which is at the mercy of every wind that blows.

## XIV. THE COMMUNAL SENSE.

As we touch on these points so we begin to see how they are interrelated. Like craftsmanship, old village life is giving place to a fusion of interests which breaks down local boundaries. Each new development, whether in the suburbs of London or of any great city, represents an attachment of interests rather than a new village in embryo. It is like the design of a patchwork quilt in which fragment is added to fragment without regard to intrinsic design. Very often new centres are planned without shops or any other interest than the houses. There is, moreover, no consideration given to space for legitimate expansion. Surely it should be a distinction to live in a new centre, and not merely a penance to be attached to another collection of streets. Such developments, considered largely, should all form part of the system of reform.

The best of the small houses which can be termed modern are distinguished by reasonableness. They are neither over-grown cottages nor arty essays in material. At Welwyn the regional characteristics of Hertfordshire have been followed. The houses are simple, the windows justly proportioned, the doors object-lessons in simplicity. The detail has been standardised. In addition some of the houses have been grouped in threes on terrace lines which have novelty. I have an especial liking for Welwyn because its expression as a community centre is unaffected; moreover, for teaching purposes it is an example of how design and construction should be blended.

## XV. THE BANNING OF BUNGALOWS.

We can say of this form of building as the Cornish fisherman remarked about pilchards: "When they are good, they are only middlin', and when they be bad they are horrid."

In the first place the Englishman does not like to sleep at the ground level. The foreigner does not mind. Secondly, a bungalow is just as costly as a two-floored cottage. Thirdly, it is vile because it admits of substitute materials. You are all familiar with the cabins in Ireland, the toll houses on the roads, and the lodges to noblemen's parks. Under certain conditions these small one-storeyed dwellings have a charm. But a village of such contraptions, displaying fifteen acres or so of substitute roofing, in the Cotswolds, in Westmorland, Yorkshire, or any other part of the country, when local material can be had in abundance, amounts to an abomination.

To conclude, we have to discuss the broadest issues, to free our minds of academic learning, to avoid the jargon terms of architecture and to deal with realities. The fact that we desire to better things means that improvement is within reach.

## BOOKS ILLUSTRATING THE EXHIBITION OF DECORATIVE ARTS, PARIS, 1925.

There is a striking diversity of opinion as to the merit of the buildings and exhibits that composed the Paris Exhibition of 1925, but its importance as a symptom can scarcely be questioned. The extent of the interest aroused is proved by the number of works on the subject issued by publishing firms in France\* and elsewhere, and of these the R.I.B.A. Library now possesses a fully representative selection.

*Bâtiments et Jardins*<sup>1</sup> forms the most complete general record of the exhibition. It is a bound volume of one hundred excellent photogravure plates prefaced by an essay by M. Roux Spitz and series of descriptive notes and plans. Nothing of any moment, interiors apart, is missing, and though gardens form a relatively small part of the whole, they are not the least interesting section. But the very urban site of the exhibition did not provide much space for gardens, *qua* gardens, and the most valuable lesson provided was the skilful use of shrubs and flowers as part of the considered decoration of buildings. A telling example of this was the green cresting of the pavilion of the Galeries Lafayette, which was equally valuable as form and as colour.

*L'Architecture Officielle et Les Pavillons*<sup>2</sup> is one of a pair of portfolios of plates. The subjects are selected by M. Patout, and the first is devoted to the national contribution to the exhibition, and includes such important works as the interior of the Grand Palais and the theatre of the Perret brothers. The second, which I believe the library possesses, deals with the Foreign section, and together the portfolios provide the cheapest adequate record of the exhibition which is obtainable.

*Ensembles Mobiliers*,<sup>3</sup> second and third series, and *Intérieurs en Couleurs*<sup>4</sup> serve as a complement to the previous volumes. The first mentioned are folios, each containing thirty-two photogravure plates arranged by M. Maurice Dufrene, who contributes an essay of which the theme is the *ensemble*. This collaboration of artists and craftsmen for the achievement of a unified impression was, to many, the most notable success of the exhibition, and while that impression was in many cases too powerful for British tastes the technique that produced it is well worthy of study and record. Colour, which played so important a part in these interiors, is difficult to register accurately, nor are the fifty plates in the second volume colour photographs. But as watercolour impressions of the designers' intentions they fill a gap and supplement the photographs and as studies in colour they are in many cases delightful. The grand salon in the Ruhlman house with its blending of greys, blues, mauves, browns and reds is masterly, but such delicate colour as the pale gold dining room of Lalique has defied the skill of the draughtsman.

\*French Books: *Exposition des Arts Décoratifs, Paris, 1925.*

1. *Bâtiments et Jardins*. M. Roux Spitz. Edition: Albert Lévy, Paris, 1925. £2.

2. *L'Architecture Officielle et les Pavillons*. P. Patout. Edition: Ch. Moreau. Paris. 15s.

3. *Ensembles Mobiliers*, 2me and 3me Séries: Maurice Dufrene. Edition: Ch. Moreau. Paris. £1 10s.

4. *Intérieurs en Couleurs*. Preface par Léon Deshairs. Edition: Albert Levy. Paris. £2 6s.

The more specialised aspects of the exhibition are not neglected. *Devantures, Vitrines, Installations des Magasins*,<sup>5</sup> by René Herbst, covers the very important contribution which the exhibition made to the art of displaying goods. Specially notable in the shop front designs illustrated is the scale relation between articles displayed and their setting. The intrinsic charm of the shop is rarely allowed to steal the interest from the goods, though some of the ironwork of the doors and screens is in itself admirable. This branch of design is dealt with in *La Ferronnerie Moderne*,<sup>6</sup> by M. H. Clouzot, and it seemed to many of us that French craftsmanship was here shown at its best. The superb work of such artists as M. Edgar Brandt is now too well known to require comment, and there are few of the thirty-six plates in this portfolio that do not provide some inspiration.

Finally, there is M. H. Rapin's *La Sculpture Décorative Moderne*,<sup>7</sup> which is not entirely concerned with the work of the exhibition. It deals chiefly with the more architectural and decorative types of sculpture, and none of the examples shown is of the "extreme left." They range from the serious work of Bourdelle through the beautifully cut stonework of Binquet to the lighter decorations of Sue et Mare, and they display a vitality and interest that are far removed from the prevailing dullness of so much of the sculpture of this country.

JOHN MURRAY EASTON [A.].

## Correspondence

## BROADCAST CRITICISM.

21 Suffolk Street, Pall Mall East, London, S.W.1.

22 September 1926.

To the Editor, JOURNAL R.I.B.A.

SIR,—After listening to Professor Reilly's condemnation of the new Regent Street "broadcasted" last week, I suggested to the B.B.C. that, in justice to those responsible for the new buildings, some defence of this achievement should receive equal publicity.

Replying to this suggestion the B.B.C., while admitting that there may be many arguments which could be produced for "broadcasting" views divergent from those expressed by Professor Reilly, regrets that time is unavailable for further discussion on this subject.

It is, in my opinion, greatly to be deplored that the exceptional publicity effected by wireless should be employed for the purpose of influencing, in one direction only, public opinion upon debatable matters, and I therefore suggest that the B.B.C. be requested by the Institute to broadcast a defence, by one of its members, of the new Regent Street.—Yours faithfully,

JAMES RANSOME [F.].

5. *Devantures, Vitrines, Installations de Magasins à l'Exposition*. René Herbst. Edition: Ch. Moreau. Paris. £1.

6. *La Ferronnerie Moderne*. H. Clouzot. Edition: Ch. Moreau. Paris. 16s.

7. *La Sculpture Décorative Moderne*, 1ère Série. H. Rapin. Edition: Ch. Moreau. Paris. 15s.



## Somers Clarke

SURVEYOR TO THE FABRIC OF ST. PAUL'S CATHEDRAL.

BY MERVYN MACARTNEY [F.], F.S.A.

By the death of Somers Clarke the select band of architects trained under the old system of master and pupil has sustained a heavy loss. He and his partner, J. T. Micklethwaite, were contemporaries in Sir Gilbert Scott's office, together with Street, Sedding, Niven, Stevenson, Bodley, Sir Thomas Jackson and a host of other men who distinguished themselves in architecture and whose influence has extended down to the present day. They all had Gothic leanings, and throughout his life Somers Clarke never missed an opportunity of making critical allusions to Classic design and construction, his pet aversion being pilasters. His dislike was really illogical, as the Gothic designers used similar forms, such as engaged columns, for precisely the same objects—viz., to strengthen a wall or to break up a flat surface with shadow.

Somers Clarke was the son of a Brighton solicitor of eminence in that town and town clerk for fifty years. He was meant to follow his father's profession, but quickly deserted the study of legal intricacies for the pen of the draughtsman. He did a great deal of church work in Brighton, which was then entering on a period of great prosperity.

His principal works were :

St. Martin's Church, Brighton. (A very fine design.)  
Addition of two aisles and chancel to Parish Church, Brighton.

Restoration of St. Nicholas's Church, Brighton.  
St. Mary's Church, Stretton, Burton-on-Trent.  
Church of St. John the Divine, Gainsborough, Lincs.  
Reid's Hotel, Madeira.

He also did a considerable amount of domestic work, amongst his largest houses being "Sandrock," Hayward's Heath; other houses are at Wargrave and Hildenborough.

He was a very complete church architect. He knew all about the construction of an organ, and was himself no mean performer on that instrument. He represented a type of church architect now fast dying out; he was a learned antiquary and a great ecclesiologist.

In 1900 he was appointed Surveyor of Chichester Cathedral and held this post until 1922.

In 1897 Somers Clarke was made Surveyor of St. Paul's Cathedral, and in 1900 his partner, J. T. Micklethwaite was made Surveyor of Westminster Abbey—a unique distinction for two partners. Their eminence in architecture as well as in ecclesiology made their selection appropriate. But troublous times for Somers Clarke were in store. Sir William Richmond had been appointed to decorate St. Paul's, and his adoption of mosaic did not meet with universal commendation. John Bentley, John Sedding and other

members of the Art Workers' Guild rose in opposition to this scheme. They agitated incessantly and finally got the Guild to condemn the proposed extension of the introduction of mosaic decoration to the Dome, and it was largely through their action that the scheme was modified, and finally abandoned.

Somers Clarke's health obliged him to spend half the year in Egypt, and this led to complications in the execution of his duties. Micklethwaite was a very efficient partner, but difficult. In consequence trouble broke out over the electric lighting installation, the work in the Chapel of Saint Michael and Saint George, and the completion of the decoration scheme. He was unfortunate in having to deal with two martinets in connection with the Order of Saint Michael and Saint George, in the persons of Sir William Baillie Hamilton and Sir Montagu Ommanney. The former was an overbearing Scotsman connected with a ducal house, and the other a retired Royal Engineer, a man of meticulous exactitude. Eventually matters became so strained that Somers Clarke, whose health was already giving him some trouble, decided to resign from St. Paul's, and soon afterwards he retired to Egypt, where he was much respected as a capable, fair-dealing architect, who used his abilities to the benefit of native and foreigner alike.

He took an enormous interest in St. Paul's Cathedral, and did some very useful work there, notably in the resetting of the floor and roof of the west portico, in the asphalting of the cornices, and in drafting the regulations for interments in the Crypt. He also took down and reset the gable over the south transept, and at one time proposed to put a "straitjacket round the drum of the Dome." This is a much debatable subject, and one on which no conclusions have been arrived at. He was also responsible for the completion of the Stevens Memorial to the Duke of Wellington, by placing the equestrian statue on a pedestal on the top of the columns.

His recent correspondence shows that he would have been glad to have carried out considerable schemes of repair on the Cathedral fabric, but was deterred by lack of funds.

The decoration of the Chapel of Saint Michael and Saint George was a favourite occupation of his, and owing to the lack of space he found that a great deal of planning and compromise was necessary for the execution of any effective design. By far the most satisfactory work that he did at St. Paul's was the installation of the electric light. He took infinite pains over the details of this task, and many models were made for

him before the work was completed. It was carried out by Benson, of New Bond Street.

He also was a generous benefactor to the Cathedral, paying, for example, out of his own pocket for the railing on the main cornice. This is generally considered an error, as it destroys the profile of the cornice, but it is undoubtedly a great advantage for the workmen. The numerous letters received from him during the last thirteen or fourteen years show an absorbing interest in the history of the preservation of the Cathedral; and the continuous contributions which he sent in response to each of the three appeals issued on behalf of the work since 1913 are another instance of his generosity.

He died in Egypt, full of years, at the age of eighty-five. His friends will not soon forget his attractive personality—the vivacity of thought and style and the strong expressions of opinion which did not conceal his kindness of heart, his penetration, or his shrewd common sense.

## Obituary

SIR CHARLES TAMLIN RUTHEN.

By DR. RAYMOND UNWIN [F].

It was about 1907 that I first met Charles Ruthen, when visiting Swansea in connection with the plans for the layout and building of a cottage exhibition on the Town Hill estate of the Corporation; he was then keenly interested in the housing question, and to the end of his sadly curtailed life he maintained his zeal for the improvement of housing conditions for the people. The son of Mr. John Ruthen, he was born in 1871, and articled in due course to Mr. Matthew Hall, of South Shields. It was in Swansea, however, that he started practice, and he there carried out many buildings of diverse kinds. He became specially known in connection with hotel construction and remodelled several well-known London hotels.

During the war he rendered great assistance to the Government in the honorary and onerous posts to which he was appointed in connection with the invidious work of apportioning the inadequate office accommodation available among the ever growing number of new Government departments and fresh officials. In this work his expert knowledge of buildings and accommodation, combined with his great organising and business capacity, enabled him to do service of the highest value to the country, and led to his ultimate appointment as Consulting Honorary Chief Inspector of Government Accommodation. The value of his services in this and other directions was acknowledged by the knighthood conferred upon him in 1919. In April 1921, Sir Alfred Mond, the new Minister of Health, called him to the Ministry as Honorary Director General of Housing to help in giving effect to the changed policy in regard to housing which the Government then adopted. He again took up with zeal and carried out with great ability another task not less difficult and thankless than those he had wrestled with during the war. He retained this post until the illness which so sadly terminated his life obliged him to

relinquish active work. Sir Charles Ruthen served on numerous Government Committees dealing with the cost and construction of buildings. He took great interest in special methods of building construction; and his call to the Presidency of such bodies as the Society of Architects, the Institution of Structural Engineers, and the Institute of Arbitrators indicates the extent to which his abilities and character were appreciated by those expert colleagues with whom he was associated in diverse fields of activity. A genial personality, he was a good colleague to work with, and his loss is widely regretted.

GEORGE WITTET [F].

By JN. BEGG [F].

It is one of the harsh penalties of service in "Greater Britain" that a man abroad is almost invariably denied that authoritative recognition by the representative organs of professional opinion which is rightly enough valued by the sane and normal man. It is a grave defect of our system of British Architecture that, with all its many virtues, this evidence of over-centralization should be so marked a feature of professional life.

George Wittet went to Bombay in Government service in 1904. He has just died there after twenty years of brilliant work, during which he designed and carried out a vast number of major building projects. Their aggregate number and size would have made a practice for a Lutyens, a Lorimer or a Baker, with enough left over for half a dozen smaller fry, and I declare that in quality they are not inferior to the average of these great Masters of Architecture. Yet his name is hardly known. It does not appear in *Who's Who in Architecture*. He cannot have left much money, for his earnings were moderate. He had no "K" or other of the "honours" which fall in plenty on the just (and unjust) of Indian officialdom.

George Wittet served his articles in the office of Mr. Heiton of Perth. He then came to Edinburgh and was for a number of years associated with Mr., now Sir, G. Washington Browne. His southward movement had reached no further than Mr. Brierley's office in York when in 1904 I found him and took him to Bombay as my assistant. Three years later, on my own translation to Simla, he was appointed my "acting" successor, being confirmed "Consulting Architect to the Bombay Government" some months thereafter. In 1919 he gave up Government service for more lucrative work under one of the Tata schemes, but was induced to return to his old appointment about a year ago.

His chief works have been the "Gateway of India," the "Prince of Wales Museum of Western India," the College of Science, the Custom House, all in Bombay; the Agricultural College and the Central Government Offices at Poona, carried out by him after some measure of collaboration with myself in design. He has built



innumerable offices, court-houses, bungalows, flats, etc., etc., both in Bombay itself and throughout the Presidency, and his works, from their virile character and ability, have had an influence over the whole Indian sub-continent that has been equalled by the work of no other architect.

Wittet had an intuitive grasp of architectural requirements that amounted to genius, a fine sense of scale and composition, a never-failing but duly restrained invention, an immense appetite for work and, not the least important, an arresting personality that could sweep away difficulties, reconcile divergent interests and inspire the most lethargic with a spirit of enthusiastic co-operation. The tragedy of his death, while still under 50, is one of the most nearly commonplace of the events of his remarkable career in India.

# THE STANDARD OF NATURAL LIGHTING IN TOWNS.

HORTON v. BEATTIE (42 T.L.R. 701).

The Judgment in the above case has not, I think, been noted in the JOURNAL. It would, however, appear to be of interest to architects in determining an important point which has hitherto left scope for considerable and sometimes expensive difference of opinion.

The case came before the Court for the not unusual reason that the owner building considered that his neighbours ought to put up with a degree of obstruction which had become fairly general in the centre of a busy manufacturing town, and consequently had disregarded their protests and proceeded with his scheme until stopped by Injunction.

From the wording of the Judgment it is obvious that there was little or no real conflict of technical evidence. The main defence to an allegation that the plaintiffs' premises would be left with insufficient light for ordinary purposes was that they would be no worse off than the majority of their neighbours.

From this counsel developed the customary defence that dwellers in towns must put up with the average conditions of the neighbourhood, and that an action for nuisance due to inadequate light could no more succeed in a crowded and overbuilt town than could an action for nuisance from smell succeed in the neighbourhood of the tanneries of Bermondsey or an action for nuisance for noise near the Clyde shipbuilding yards.

To this defence the Judgment is directly addressed. It declared that "the standard of lighting required to eliminate the existence of a nuisance was of necessity an absolute standard, as the human eye required the same light for reading or sewing in Wolverhampton as in Mayfair."

The case was reported briefly in the *Law Times* of 31 July last, and a long leading article upon it appears in the issue of the same periodical of 7 August.

Opinions may and undoubtedly do differ amongst architects as to the extent to which building in overbuilt towns should be restricted by the necessity for leaving minima of adequate light to neighbouring premises; but there can be no question as to the value of such a clean-cut

decision upon one of the few moot points in the present law now left by recorded judicial decisions.

Building owners at least know or can ascertain more or less precisely where they are, and can frame their schemes accordingly. This is one of the greatest advantages of settled law laid down in careful detail in numbers of concurring and recorded judgments.

It would appear to be open to question whether it would be equally advantageous for all light disputes to be settled by arbitrators, who would presumably be bound by no judgments except their own opinion, whose decisions would be subject to no appeal, and would not be recorded or probably even reported.

One of the most fertile causes of all disputes between neighbours is uncertainty as to each other's precise rights.

PERCY J. L. WALDRAM.

## R.I.B.A. ORDINARY GENERAL MEETINGS, SESSION 1926-27.

*Mondays at 8 p.m., except where otherwise stated.*  
1926.

*November 1.*—INAUGURAL MEETING: "President's Address at 8.30.

*November 15.*—GENERAL MEETING: "Bridges and Traffic," by H. V. Lanchester [F.].

*December 13.*—GENERAL MEETING: "The Work of Leonard Stokes," by George Drysdale [F.].  
1927.

*January 3.*—GENERAL MEETING: "Mosaics," by Boris Anrep.

*January 17.*—GENERAL MEETING: Award of Prizes and Studentships: Criticism by Robert Atkinson [F.] on work submitted.

*January 31.*—GENERAL MEETING: President's address to Students at 8.30. Presentation of prizes.

*February 28.*—GENERAL MEETING: "Organisation and Cost of the Building Industry in America," by Harvey Corbett [F.].

*March 14.*—GENERAL MEETING: "Modern French Architecture," by Howard Robertson [F.].

*April 11.*—GENERAL MEETING: "The Planning of East Kent," by Professor Patrick Abercrombie [F.].

*May 16.*—GENERAL MEETING: "Modern Hospital Planning": (a) "English Hospitals," by H. Percy Adams [F.]; (b) "American Hospitals," by Lionel G. Pearson [F.].

*May 30.*—GENERAL MEETING: "Devonshire House Buildings," by Thomas Hastings [H.C.M.].

## A.B.S. SCHEME OF INSURANCE.

The Architects' Benevolent Society has recently negotiated the following insurances through its agency:—

£1,467—Deferred Children's Assurance.

£20,000—Fire risk on building in course of erection.

£25,000—Do.

£2,000—Home Protection.

Other insurances are in process of going through, and it is earnestly hoped that architects will give the Scheme their warm support in the coming Session.

## SIR JOHN SOANE'S MUSEUM.

The museum will be open free on Thursdays and Fridays in October from 10.30 a.m. to 5 p.m., and in November from 10.30 a.m. to 4 p.m.

## THE PRINCE OF WALES AND DOMINION ARCHITECTURE.

The Prince of Wales has graciously acceded to the request of the Council of the Royal Institute of British Architects that his name should be included in the list of Patrons of the Exhibition of Dominion and Colonial Architecture which is to be held at the R.I.B.A. from 19 October to 17 November.

In addition to His Royal Highness, the following have granted their Patronage to this Exhibition which will be opened next week at the R.I.B.A. :—

The Rt. Hon. L. C. M. S. Amery, P.C., M.P., Secretary of State for Dominion Affairs.

The Hon. Peter C. Larkin, High Commissioner for the Dominion of Canada.

The Rt. Hon. Sir Joseph Cook, P.C., G.C.M.G., High Commissioner for the Commonwealth of Australia.

The Hon. Sir James Parr, K.C.M.G., High Commissioner for New Zealand.

The Hon. J. S. Smit, High Commissioner for the Union of South Africa.

## BOARD OF ARCHITECTURAL EDUCATION. R.I.B.A. ARCHIBALD DAWNAY SCHOLARSHIPS 1926-27.

In accordance with the terms of the will of the late Sir Archibald Dawnay, the Royal Institute of British Architects have awarded the R.I.B.A. Archibald Dawnay Scholarship of £75 for the year 1926-27 to Miss C. W. Preston, School of Architecture, Architectural Association, and the R.I.B.A. Archibald Dawnay Scholarship of £50 for the year 1926-27 to Mr. E. B. O'Rorke, School of Architecture, Architectural Association.

Mr. R. P. Cummings, School of Architecture, Architectural Association, who was awarded a Special Scholarship of £50 for the year 1925-26, has been awarded a second year Scholarship of £75 for the year 1926-27, and Mr. W. R. Brinton, School of Architecture, Architectural Association, who was awarded a Scholarship of £50 for the year 1925-26, has been granted a renewal of his Scholarship for the year 1926-27.

## THE R.I.B.A. (HENRY SAXON SNELL) PRIZE 1926-1927.

The attention of competitors is called to the fact that on page 28 of the current R.I.B.A. Prizes and Studentship Pamphlet the list of drawings required for an Isolation Hospital includes an "½ inch detail of a sanitary block and any special feature of the design." This should read "½ inch detail. . . etc."

## ASHMOLEAN MUSEUM, OXFORD

### PROPOSED WINDOW TO WREN

#### SUBSCRIPTION LIST

The following additional subscriptions have been received from members of the Institute :—

Sir Banister Fletcher, Vice-President R.I.B.A.	£1 1 0
Mr. E. Stanley Hall, Hon. Secretary, R.I.B.A.	£1 1 0
Messrs. Wm. and T. R. Milburn [FF.]	- £1 1 0
Mr. Louis de Soissons [F.]	- - - £1 1 0

## Notices

### THE INAUGURAL GENERAL MEETING.

The first General Meeting (Ordinary) of the Session 1926-27 will be held on Monday, 1 November 1926, at 8.30 p.m., for the following purposes :—

To read the minutes of the Fifteenth General Meeting of the Session 1925-26, held on 21 June 1926 ; formally to admit members attending for the first time since their election or transfer.

To read the names of candidates nominated for election on 29 November 1926.

Mr. E. Guy Dawber, F.S.A. (President), to deliver the Inaugural Address of the Session.

### ARCHITECTS' DEFENCE UNION.

A meeting of architects will be held in the R.I.B.A. Meeting Room, on Monday, 18 October, 1926, at 6 p.m., to consider the scheme for the formation of an Architects' Defence Union.

The chair will be taken by Major Harry Barnes, and the proposals will be submitted by Mr. J. Douglas Scott, Chairman of the R.I.B.A. Practice Standing Committee.

All architects are cordially invited to attend.

### EXHIBITION OF DOMINION AND COLONIAL ARCHITECTURE.

The Exhibition will be open in the R.I.B.A. Galleries from Wednesday, 20 October, to Wednesday, 17 November 1926, inclusive, between the hours of 10 a.m. and 8 p.m. [Saturdays \*5 p.m.] Admission free. The opening ceremony and Private View will take place on Tuesday, 19 October 1926, at 3 p.m. It is hoped that members will be present in large numbers.

### R.I.B.A. ANNUAL DINNER, 1926.

The Annual Dinner will take place on Tuesday, 23 November 1926, in the Guildhall, E.C. (by the kind permission of the City Corporation). H.R.H. the Prince of Wales [Hon. F.R.I.B.A.] has graciously consented to attend and present the Royal Gold Medal, 1926, to Professor Ragnar Ostberg. Full particulars are issued with this copy of the Journal.

### ASSOCIATES AND THE FELLOWSHIP.

Associates who are eligible and desirous of transferring to the Fellowship Class are reminded that if they wish to take advantage of the election to take place on 14 February 1927, they should send the necessary nomination forms to the Secretary R.I.B.A., not later than 27 November 1926.

### LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

### THE R.I.B.A. NEW CLASS OF SUBSCRIBERS.

In the R.I.B.A. Supplemental Charter 1925, provision is made for the formation of a non-corporate class of Subscribers. The Council have the power to elect to this



class any persons who, not being professional architects, are interested in the activities of the Royal Institute and in architectural matters generally.

"Subscribers" are entitled to use the Loan and Reference Library, to attend all General Meetings (except private Business Meetings) and to receive a copy of the Annual Report. They are not, however, entitled to use in connection with their name or business any words or initials indicating that they are Members of or connected with the Royal Institute.

The annual contribution payable by a "Subscriber" is £1 1s. The first payment becomes due within two months of election and subsequent payments on the first of January each year. Subject to the additional payment of 12s. per annum, Subscribers also receive post free the R.I.B.A. JOURNAL, which is published fortnightly during the Session (November to June) and monthly during the recess.

The Council cordially invite application from ladies or gentlemen who desire to be thus associated with the work of the Royal Institute, and the necessary nomination form can be obtained on application to the Secretary R.I.B.A.

There was an Exhibition on the walls of the galleries of Architects' Working Drawings, kindly lent by Mr. Sylvester Sullivan.

#### ROOMS FOR ARBITRATIONS, ETC.

Convenient rooms for arbitrations, etc., are now available for hire at No. 28 Bedford Square, W.C.1, at a fee of £2 2s. per day. All enquiries with regard to vacant dates, etc., should be addressed to Mr. C. McArthur Butler at that address.

#### R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28 Bedford Square, London, W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the Committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.

#### INFORMAL LECTURE ON ARCHITECTURE FOR WORKERS IN THE BUILDING TRADES.

The first of a series of Informal Illustrated Lectures on Architecture, confined to workers in the Building Trades, was held by the R.I.B.A. on Thursday, 7 October 1926, in the R.I.B.A. Galleries, 9 Conduit Street, W.1. Mr. Maurice E. Webb, D.S.O., M.C., Chairman of the Board of Architectural Education, was in the Chair, and Mr. L. Sylvester Sullivan [F.], Hon. Secretary of the Board of Architectural Education, read a paper on "The Job."

#### R.I.B.A. JOURNAL.

The attention of all Members is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. This does not mean that members are expected to urge contractors and manufacturers to advertise in the JOURNAL; they can, however, do a great deal if they will read the JOURNAL regularly and avoid any needless depreciation of its advertising value.

#### ELECTION OF MEMBERS.

29 NOVEMBER 1926.

The following applications for election have been received. Notice of any objection or other communication respecting the candidates must be sent to the Secretary for submission to the Council prior to Monday, 1 November 1926.

#### AS FELLOWS (40).

ALLISON: WILLIAM, P.A.S.I. [A. 1920], 50 Rathbone Place, W.1; 9 Tavistock Square, W.C.1.

AYLWIN: GUY MAXWELL [A. 1914], Blenheim Lodge, Mont au Pretre, Jersey, C.I.

BAGOT: WALTER HERVEY [A. 1904], Steamship Buildings, Adelaide; Forest Lodge, Aldgate, South Australia.

BISHOP: JOHN PERCIVAL [A. 1901], 30 Duke Street, St. James', S.W.1; Topcliffe Grange, Farnborough, Kent.

BROWNLEE: HERBERT JOHN [A. 1912], 6 Church Square, Cape Town.

CLEVELAND: CHARLES BARRY [A. 1904], 2 Leader Lane, Toronto; 60 Prince Arthur Avenue, Toronto, Canada.

COGGIN: CLARENCE TILT [A. 1881], 69 Kennington Oval, S.E.; The White Cottage, Lifford Road, Wandsworth Common, S.W.

COWLEY: CAPTAIN HERBERT REGINALD, P.A.S.I. [A. 1913], Bank Chambers, 26 High Street, Southend-on-Sea; The Cottage, 99 Eastwood Boulevard, Westcliff-on-Sea.

DAVIES: WILLIAM GEORGE [A. 1920], City Architect, Town Hall, Sheffield.

EATON: GEORGE MORLEY, P.A.S.I. [A. 1920], 6 The Strand, Derby; Hillside, Littleover, nr. Derby.

FORD: LAWTON ROBERT, F.S.I. [A. 1896], 32 Orchard Street, Oxford Street, W.1; 58 Upper Berkeley Street, W.1.

GALL: ROBERT ROBB [A. 1903], 177 Union Street, Aberdeen; 10 Loanhead Terrace, Aberdeen.

GAUNT: OLIVER [A. 1912], 4 Midan Suares, Cairo; Maison Amato, Giza (Mudirieh), Cairo, Egypt.

GUMMER: WILLIAM HENRY [A. 1910], 721 New Zealand Insurance Buildings, Queen Street, Auckland; Mountain Road, Auckland, New Zealand.

HAWARD: FRANCIS ROBERT BOYD [A. 1902], 5 Queen Street, Great Yarmouth; Mansard, Poplar Avenue, Gorleston-on-Sea.

HILL: HENRY LEONARD GAUNTLETT, O.B.E. [A. 1890], Donhead Cottage, Donhead St. Andrew, Shaftesbury.

HORTH: FREDERICK JOHN [A. 1921], Custom House Buildings, Whitefriargate, Hull; 19 Albany Street, Hull.

JAMES: CHARLES HOLLOWAY [A. 1918], 15 Gower Street, W.C.1; 1 Hampstead Way, N.W.11.

JONES: GEORGE SYDNEY [A. 1891], 113 Pitt Street, Sydney; The Crescent, Pennant Hills, Sydney, Australia.

KERR: ROBERT SIDNEY [A. 1921], Grafton House, 2 Golden Square, W.1; 42 Addison Road, W.14.

LYNHAM: ARTHUR GEORGE [A. 1910], 23 Gelliwastad Road, Pontypridd; Fernleigh, Healdon, Whitchurch, Cardiff.

MAXWELL: JOSEPH CHARLTON [A. 1894], 14 Saville Row, Newcastle-on-Tyne; Belfield, Kenton Road, Newcastle-on-Tyne.

NIGHTINGALE: FREDERICK BAYLISS [A. 1921], 31 Oakley Street, Chelsea, S.W.3; 7 Cricklade Avenue, S.W.2.

NORRIS: ERNEST BOWER [A. 1919], 9 Albert Square, Manchester; 182 Corporation Street, Stafford.

WICKENDEN: ARTHUR FRED, A.M.Inst.C.E., P.A.S.I. [A. 1907], Professor of Architecture, Royal School of Engineering, Giza, Cairo, Egypt.

And the following Licentiatees, who are qualified under Section IV, Clause C (ii) of the Supplemental Charter of 1925:—

- BROCKLEHURST : ARTHUR, Palatine Bank Buildings, 10 Norfolk Street, Manchester; Sunny Bank, Newchurch-in-Rossendale, Lancs.
- BUCK : WALTER GERARD, Shrewsbury Chambers, Campo Lane, Sheffield; 19 Montgomery Road, Sheffield.
- CAMERON : RHODERIC, St. Anns, Crieff Road, Aberfeldy, Perthshire.
- CHANDABHOY : MUNCHERSHAH NUSSERWANJEE, Raja Bahadur Motilal Mansion, Apollo Street, Fort, Bombay, India.
- GOODMAN : JOHN, 21 Waterloo Street, Birmingham; 52 Salisbury Road, Moseley, Birmingham.
- HARRISON : FRED, 30 Willow Street, Accrington; Beechwood, Lytham St. Annes.
- PROSSER : HOWELL, Architect to the Walthamstow Education Committee, Education Committee Offices, High Street, Walthamstow, E.17; 14 Eastfield Road, Walthamstow, E.17.
- TOWNEND : THOMAS, District Bank Chambers, Rochdale; 2 Ashfield Road, Rochdale.

And the following Licentiate who have passed the Qualifying Examination :—

- CARYER : MAJOR GEORGE THOMAS, O.B.E., Public Works Department, Jerusalem, Palestine.
- FORRESTER : ALFRED, 141 Albert Road, Middlesbrough; 5 Clairville Road, Grove Hill, Middlesbrough.
- HICKSON : CLIFFORD, St. Peter's Street, Huddersfield; Five Gables, South Crosland, Huddersfield.
- LAWSON : SYDNEY HERBERT, Emerson Chambers, Newcastle-on-Tyne; Middleton, Belford, Northumberland.
- TURNER : ROBERT CHARLES, 10 Haiphong Road, Gordon Road, Shanghai, China.
- VINYCOMB : JOHN KNOX, 74 Park Lane, Wallington, Surrey.
- WHESTON : WRAY, 47 Victoria Street, S.W.1; 7 Crauford Rise, Maidenhead.

#### AS ASSOCIATES (71).

- ALEXANDER : RICHARD RENNIE [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 38 Lilybank Place, Aberdeen.
- APPS : LESLIE MASON [Special], The Nest, Sutton Valence, Maidstone, Kent.
- ARTHUR : JOHN ABERCROMBY [Final], 67 Torrington Square, W.C.
- BARRETT : WALTER [Special], 111 Manchester Road, Bury, Lancs.
- BARRINGTON-BAKER : JAMES [Final], Grove Lodge, Finchley, N.3.
- BARTON : HERBERT LESLIE, B.Arch., Liverpool [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 14b Mortimer Crescent, N.W.6.
- BENT : FRANK [Final], Min-y-don, Glan Conway, Denbighshire.
- BOOTH : ROLFE GILBERT [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Lakeswood, Town Court, Orpington, Kent.
- BOURNE : JOHN HENRY [Final], 24 Cotham Road, Cotham, Bristol.
- BRUCE : WILLIAM GEORGE HAY BLACK [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 61 Watson Street, Aberdeen.
- BRYCE : WILLIAM THEODORE PERCIVAL, M.A. Cantab., B.Sc. Arch. Glasgow [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Farmfield, Penicuik, Midlothian.
- CACHEMAILLE-DAY : NUGENT FRANCIS CACHEMAILLE [Final], 61 Grove End House, St. John's Wood Road, N.W.8.
- CALDER : HERBERT KITCHENER [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 251 Westburn Road, Aberdeen.
- CARTER : PETER GEORGE JEFFERY [Final], The Red Cottage, Peppard Road, Caversham, Oxon.
- CARTER : RICHARD JEFFERY [Final], The Red Cottage, Peppard Road, Caversham, Oxon.
- CHESTER : HAROLD WILLIAM [Final], 94 Langham Road, Teddington, Middlesex.
- DAVIDSON : JAMES HENDERSON [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 16 Abercairn Road, Streatham S.W.16.
- DUNPHY : NORAH, B.Arch., Liverpool [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Donnybrook, Llandudno N. Wales.
- DURNIN : LEO [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 6 Blenheim Place, Aberdeen.
- EDWARDS : KENDRICK, M.Inst.C.E. [Special], 16 Donegal Square South, Belfast.
- FELGATE : ERIC GEORGE [Final], 11 Victory Road, Ilkley, Yorks.
- FOUBISTER : PETER JOHN MALCOLM JOHNSTONE [Special], Public Works Department, Nairobi, Kenya Colony.
- GOLDSMITH : EDWARD FELIX [Final], 11b Bishopswood Road, Highgate, N.6.
- GREEN : FRANK STANLEY MORDEN [Final], 272 Willesden Lane, Cricklewood, N.W.2.
- GREY : JOHN [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], The White House, Cobham, Surrey.
- HORNER : HUGH BALDWIN LYLE [Final], 31 Constantine Road, N.W.3.
- INGLIS : FRANK ALEXANDER GREIG [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], 286 Great Western Road, Aberdeen.
- LEWIS : ERNEST WAMSLEY [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 1 St. Edmund's Terrace, Regent's Park, N.W.8.
- LEY : ARTHUR HARRIS [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 21 Bishopsgate, E.C.2.
- LLOYD : WILLIAM ANTONY SAMPSON, M.A. [Final], 3 Horseferry Road, Westminster, S.W.1.
- MACDONALD : ALISTER GLADSTONE [Final], 9 Howitt Road, Hampstead, N.W.3.
- MACMANUS : FREDERICK EDWARD BRADSHAW [Final], 3 Rotherwick Road, N.W.11.
- MONROE : LEONARD [Passed five years' course at Cardiff Technical College. Exempted from Final Examination after passing Examination in Professional Practice], 1 Victoria Road, Penarth, South Wales.
- MORRISON : JAMES [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], Upper Kirkgate, Huntly, N.B.



- NASH : EDWARD TINDAL ELWIN [Final], The Cedars, Cranford, Middlesex.
- NASH : VIVIAN LESLIE [Final], 7 Duncan Terrace, N.I.
- OAKLEY : WILLIAM OWEN [Passed five years' course at Cardiff Technical College. Exempted from Final Examination after passing Examination in Professional Practice], 28 Monthermer Road, Cathays, Cardiff.
- OLDACRE : WILLIAM BERNARD [Final], 130 Princes Road, Hartshill, Stoke-on-Trent.
- PARKER : CAPTAIN ROBERT, M.C., P.A.S.I. [Special], Roslyn, Old Road, Llandudno.
- PETERS : HENRY ALBAN, B.Arch. Liverpool [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 8 Union Road, Pennsylvania, Exeter.
- PHILLIPS : HERBERT GORDON, B.Arch. Liverpool [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 27 Brelaide Road, Stoneycroft, Liverpool.
- PRICE : ARTHUR JOHN [Final], The Hollies, Hilderstone, Stone, Staffs.
- PRINGLE : GORDON, M.A.Cantab [Special], 1a Kensington Place, W.8.
- PUNCHARD : STANLEY CHARLES [Final], 7 Second Avenue, Heaton, Newcastle-on-Tyne.
- REMNANT : EUSTACE ARCHIBALD, P.A.S.I. [Special], 82 Cecil Avenue, Wembley, Middlesex.
- RICHARD : JOHN CYRIL [Final], 24 Romsey Road, Winchester.
- RITCHIE : JAMES WATSON, Dip.Arch. (Edin.) [Passed five years' course at Edinburgh College of Art. Exempted from Final Examination after passing Examination in Professional Practice], 6 Gladstone Terrace, Edinburgh.
- ROBERTS : ALFRED GEORGES [Special], 27 Lawn Crescent, Kew Gardens, Surrey.
- ROBERTS : DOUGLAS HUGH POYNTER [Final], 21 Grosvenor, Bath.
- ROBERTS : THOMAS IDWAL [Special], 1 Carlton Terrace, Kelvinside, Glasgow.
- ROBERTSON : ALBERT VICTOR [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], Ardlea, 14 Attadale Road, Inverness.
- SALT : GEOFFREY WYNDHAM [Final], The Royd, Selborne Road, Handsworth Wood, Birmingham.
- SAUNDERS : DYCE CHALMERS [Final], 72 Walmer Road, Toronto, Canada.
- SCOTT : CECIL JAMES [Special], Tolgarth, Rochford, Essex.
- SEELY : HENRY JOHN ALEXANDER [Special], 3 Queen Square Place, Queen Anne's Gate, Westminster, S.W.1.
- SIDNELL : WILLIAM EWART [Final], 12 Desenfans Road, Dulwich, S.E.21.
- SLOOT : LAMBERT LOUIS THEODORE [Special], 3 Osmond Avenue, Hampton, Middlesex.
- SMITH : FRANK HALLIBURTON [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 19 Redington Road, Hampstead, N.W.3.
- SMITH : HARRY HIRST [Final], Merridale, 6 Hereford Road, Southport.
- SNAILUM : TERENCE WALTER [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Wingfield Road, Trowbridge, Wilts.
- SOPER : DOROTHY ELIZABETH [Passed six years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination after passing Examination in Professional Practice], Malcolm's Mount, Stonehaven, Kincardineshire.
- SUTCLIFFE : BRIAN LISTER [Final], 44 Temple Fortune Hill, N.W.11.
- THEOBALD : ROBERT COURTENAY, B.A.Lond. [Final], The Penn Club, 9 Tavistock Square, W.C.1.
- THRASHER : WILLIAM JAMES [Final], Steine House, Brighton.
- TRENT : WILLIAM SYDNEY [Final], 6 Broad Street Place, E.C.2
- TYLER : ERIC BRIAN [Final], Kilbirnie, Llanishen, Cardiff.
- WALL : MAUD AMY MARGARET [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 31 St. George's Mansions, Red Lion Square, W.C.1.
- WATSON : JOHN, JUNR. [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 7 Church Road, Giffnock, Renfrewshire.
- WHITE : LEONARD WILLIAM THORNTON [Final], 80 Mayfield Street, Hull.
- WILSON : EDWARD DOUGLAS [Final], 31 Cambridge Street, W.2.
- WRIGHT : HUBERT [Special], 122 Clarence Gate Gardens, N.W.1.
- AS HON. FELLOW (1).
- LEE OF FAREHAM : THE RT. HON. VISCOUNT, P.C., G.C.S.I., G.B.E., K.C.B., 18 Kensington Palace Gardens, W.8.
- AS HON. ASSOCIATES (5).
- DAVISON : SIR WILLIAM HENRY, K.B.E., D.L., M.P., 14 Kensington Park Gardens, W.11.
- HEATH : SIR HENRY FRANK, K.C.B., 5 Milbourne Lane, Esher Park, Surrey.
- HILL : LEONARD ERSKINE, M.B., M.R.C.S., L.R.C.P., F.R.S., Fellow of University College, London; Director, Department of Applied Physiology, National Institute for Medical Research; Osborne House, Loughton, Essex.
- STRADLING : REGINALD EDWARD, M.C., D.Sc., Ph.D., Assoc.M.Inst.C.E., Director of Building Research, Department of Scientific and Industrial Research, Building Research Station, Bucknall's Lane, Garston, near Watford.
- WOOLLEY : CHARLES LEONARD, M.A., Uplands, Bathwick Hill, Bath.
- AS HON. CORRESPONDING MEMBERS (8).
- CLEMMENSEN : ANDREAS LAURITZ, Tingskiftevej 4, Copenhagen.
- HÜTL : DR. DESIDERIUS VON, Professor of the Technical University, Budapest, Rezoda utca 5, Budapest 1.
- KORB : PROFESSOR FLORESTAN, VIII Baross utca 74, Budapest.
- LEGROS : GEORGES, Chevalier de la Légion d'Honneur, Président de la Société des Architectes Diplômés par le Gouvernement, 121 Avenue de Wagram, Paris.
- MEDARY : MILTON BENNETT, President, American Institute of Architects; Member, National Commission of Fine Arts, 47th Street and City Line, West Philadelphia, U.S.A.
- MONBERG : CHRISTEN EMANUEL, Member of the Royal Academy of Art, Copenhagen, Amaliegade 29a, Copenhagen.
- RAFU : AAGE, Amaliegade 27, Copenhagen.
- WAID : DAN EVERETT, B.S., LL.D., 1 Lexington Avenue, New York, U.S.A.

## Competitions

### PERTH ACADEMY COMPETITION. LIMITED TO ARCHITECTS IN PRACTICE IN SCOTLAND.

The Conditions of the above Competition are in accordance with the R.I.B.A. Regulations for the Conduct of Architectural Competitions.

## LEAGUE OF NATIONS BUILDING AT GENEVA.

The conditions of the competition for the new building at Geneva have been received. The jury consists of M. H. P. Berlage (The Hague), Sir John J. Burnet (London), M. Charles Gato (Madrid), M. Joseph Hoffman (Vienna), M. Victor Horta (Brussels), President; M. Charles Lemaesquier (Paris), M. Karl Moser (Zurich), M. Attilio Muggia (Bologna), M. Ivar Tengbom (Stockholm). The competition will be open until 25 January 1927. Total cost including the architect's fees should in no case exceed the total sum of 13 million Swiss francs. Copies of the conditions may be obtained at the Secretariat, Geneva, at a cost of 20 Swiss francs.

## RECONSTRUCTION OF THE MOSQUE OF AMROU, CAIRO, COMPETITION.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

## SCHEME FOR BUILDING LARGE RESIDENCES, CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competition.

## COMPETITION FOR THE LAYOUT OF HOUSES ON PENY-WAUN SITE.

The Competitions Committee desire to call the attention of Members to the fact that the Conditions of the above Competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the Competition.

## MANCHESTER TOWN HALL EXTENSION. PRELIMINARY COMPETITION.

The Corporation of the City of Manchester invite architects to submit designs in competition for the Town Hall Extension, Municipal Offices, and Public Reference Library proposed to be erected on a site adjoining the Town Hall. Assessors, Mr. T. R. Milburn [F.], Mr. Robert Atkinson [F.] and Mr. Ralph Knott [F.]. Last day for questions 2 October 1926. Final date for submission of designs 8 January 1927. Conditions may be obtained by applying to the Town Clerk, Town Hall, Manchester, and depositing £1 is.

## Members' Column

## MR. R. ELSEY SMITH

Mr. R. Elsey Smith [F.] has taken offices at 235 Westminster Bridge Road (opposite the County Hall), where he is resuming general and consulting practice from 1 October.

## MESSRS. H. E. HAWKER AND PARTNERS.

H. E. HAWKER, F.R.I.B.A., F.S.I., Architect and Surveyor, St. Peter's Chambers, Bournemouth, has taken into partnership William John Mountain, L.R.I.B.A., and Alfred G. S. Bailey, L.R.I.B.A., who have respectively been associated with him for upwards of twenty years. The style of the firm will be Messrs.

H. E. Hawker and Partners, and the practice will be continued at St. Peter's Chambers, Bournemouth.

## MESSRS. WITTEN AND WALKER.

MR. R. BOUTFLOUR WITTEN, L.R.I.B.A., and Mr. Smart Walker, L.R.I.B.A., have entered into partnership under the name of Witten & Walker, L.R.I.B.A., with offices at 144A Newgate Street, Bishop Auckland and Colburn Estate Offices, Hildyard Row, Catterick Camp, Yorks.

## PREMIUM PUPIL.

A.R.I.B.A. wishes to get into touch with a firm of Architects willing to take a Premium Pupil.—Apply Box No. 8106, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## "DAILY MAIL" IDEAL HOUSES COMPETITION.

LICENTIATE, expert Perspectivist, offers to prepare perspective for the above in accordance with the conditions for a moderate fee. Inquiries invited.—Apply Box 8246, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## APPOINTMENT VACANT.

HONGKONG.—Required by leading firm of Architects and Civil Engineers in Hongkong, the services of first-class Architectural Assistant, preferably an A.R.I.B.A.; three years' agreement with prospects of partnership. Salary \$700 Mex. per month. Applications, with full particulars, qualifications, etc., to Box 6106, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## APPOINTMENT WANTED.

A.R.I.B.A. desires position or partnership, preferably abroad. Has had experience of English County education and Colonial Government work, and has managed for the last three years general practice abroad. Competitions, working drawings, quantities and supervision, used to construction in reinforced concrete. Photographs of work can be seen on application at the R.I.B.A.—Reply Box 2232, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## ASSISTANCE OFFERED.

LICENTIATE, own London office, 'phone, etc., offers assistance to other architects. Designs, Perspectives, Details and Working Drawings. First-class experience. Terms reasonable.—Box 121, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

## CHANGES OF ADDRESS.

MR. A. BRYETT [A.] has changed his address to 36 Ebury Street S.W.1.

MESSRS. CHAS. HEATHCOTE & SONS, of Manchester and London are leaving their present London address (38 Parliament Street, S.W.) owing to the expiration of their lease, and all communication should, after 11 October, be made to them at 20 Scarsdale Villa Kensington, until further notice.

MR. BASIL B. HOOPER [A.] has changed his address from A.M. Buildings, Victoria Street, to Southern Cross Building, Chancery Street, Auckland, N.Z. Telephone: 45267.

MR. W. COURTENAY LE MAITRE, F.R.I.B.A., has changed his address from 133 Moorgate, E.C.2, to 28 Albemarle Street, W. Telephone No.: Ger. 1169.

## TRADE CATALOGUES.

MISS BARBARA POUCHKINE [A.] is opening an office on 20 October at Lee Studio, Adam and Eve Mews, High Street, Kensington (Tel., 8956 Kelvin) and will be glad to receive trade catalogues.

## ROOM TO LET.

FIRM of Architects have small room to let in Adelphi, W. Quiet, good light, fireplace, separate door to landing and communicating door to own Drawing Office. Facilities for use latter, including typewriting and telephone, can be arranged. Inclusive rent £40 p.a.—Apply Box No. 1106, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## OFFICE WANTED.

A.R.I.B.A. requires offices, or would consider sharing suite. West or Westminster district. Please state full particulars with inclusive terms.—Apply Box No. 1011, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

## R.I.B.A. JOURNAL.

Dates of Publication.—1926: 6th, 20th November; 4th, 18th December. 1927: 8th, 22nd January; 5th, 19th February; 5th; 19th March; 2nd, 23rd April; 7th, 21st May; 11th, 25th June; 17th July; 13th August; 17th September; 15th October.



[SUPPLEMENT]

# ADDITIONS TO THE R.I.B.A. LIBRARY FROM OCTOBER 1925—SEPTEMBER 1926

## THE REFERENCE LIBRARY.

### Books and Pamphlets.

#### Abercrombie (Patrick)

The preservation of rural England. 4o. *Liverpool* 1926  
PRESENTED BY THE UNIVERSITY PRESS OF LIVERPOOL.

#### Abercrombie (P) and Archibald (John)

East Kent regional planning scheme, preliminary survey. 4o. *Liverpool* and *Lond.* 1925  
PRESENTED BY THE UNIVERSITY PRESS OF LIVERPOOL.

#### Abraham (R M)

Surveying instruments. 8o. *Lond.* n.d.  
PRESENTED BY C. F. CASELLA & Co., THE PUBLISHERS.

#### Adams (Henry)

Some reminiscences: seventy-five years' work in civil engineering. 4o. *Lond.* 1925  
PRESENTED BY THE AUTHOR [F.].

#### Addison (W I)

Roll of the graduates of the University of Glasgow. 4o. *Glasgow* 1898  
PRESENTED BY THE UNIVERSITY.

#### Aldridge (H R)

Guide to the administration of the Housing Acts 1923, 1924. 4o. *Lond.* 1924  
PRESENTED BY THE AUTHOR.

#### Amsterdam

MAATSCHAPPIJ TOT BEVORDERING DER BOUWKUNST, BOND VAN NEDERLANDSCHE ARCHITEKTEN.  
Bouwkundig Weekblad. fo. *Amsterdam* 1925-26  
PRESENTED BY THE SOCIETY.

#### Architectural Association

Journal. 4o. *Lond.* 1925-26  
Year book and Diary 1926 4o. *Lond.* 1926  
PRESENTED BY THE ASSOCIATION.

Book of design by senior students of the School with introductory essays by Robert Atkinson, Howard Robertson, Oscar Faber, V. O. Rees, W. M. Keesey and L. H. Bucknell. 4o. *Lond.* 1924  
PRESENTED BY ERNEST BENN, LTD., THE PUBLISHERS.

#### Ashby (Thomas) and Pierce (S. Rowland)

The piazza del Popolo: Rome. 4o. *Lond.* 1924  
PRESENTED BY S. ROWLAND PIERCE, ROME SCHOLAR IN ARCHITECTURE, 1921.

#### Auctioneers' and Estate Agents' Institute

Journal. 8o. *Lond.* 1925-26  
PRESENTED BY THE INSTITUTE.

#### Baker (G L)

Blackheath: the story of the Royal hundred. sm. 4o. *Blackheath* [1925]  
PRESENTED BY THE PUBLISHERS, THE MORDEN PRESS.

#### Bankart (G P) and Bankart (C E)

Modern plasterwork construction. fo. *Lond.* 1926  
PRESENTED BY THE AUTHORS.

#### Berks, Bucks and Oxon Architectural Association

Year book 1926. pam. 8o. *Oxford* 1926  
PRESENTED BY THE ASSOCIATION.

#### Berlin

BUNDES DEUTSCHER ARCHITEKTEN.  
Die Baugilde. 4o. *Berlin* 1925-26  
PRESENTED BY THE SOCIETY.

#### DEUTSCHER ARCHITEKTEN UND INGENIEUR-VEREINE.

Deutsches Bauwesen. 8o. *Berlin* 1925-26  
PRESENTED BY THE SOCIETY.

#### Biggar (C W)

The directory of Contractors and Public Works Annual 1926. 8o. *Lond.* 1926  
PRESENTED BY THE AUTHOR.

#### Boklund (Harald) Editor

100 Blad Svensk Byggnadskonst 4o. *Malmö, Sweden* 1923  
PRESENTED BY MR. E. J. W. HAWKINS.

#### Bolton (A T)

The dome as the basis of an architectural system illustrated from the renaissance period of architecture, with twelve plates of examples mainly Italian. 4o. *Lond.* [1900]  
PRESENTED BY THE AUTHOR [F.].

#### Bombay

BOMBAY ARCHITECTURAL ASSOCIATION.  
Year book 1924-25. 8o. *Bombay* [1925]  
PRESENTED BY THE ASSOCIATION.

**Brandon (R and J A)**

Analysis of gothick architecture. 2 vols.  
4o. *Lond.* 1847

PRESENTED BY CHAS. A. DAUBNEY [F.].

**Briggs (M S)**

Short history of the building crafts. 8o. *Oxford* 1925

PRESENTED BY THE AUTHOR [F.].

**British Non-Ferrous Metals Research Association**

Research work in progress or completed.  
pam. 8o. *Birmingham* 1925

PRESENTED BY THE ASSOCIATION.

**British Engineering Standards Association**

British Standard Specification for genuine dry  
white lead for paints. pam. 8o. *Lond.* 1926

British Standard Specification for genuine white  
lead oil paste for paints. pam. 8o. *Lond.* 1926

British Standard Specification for portland cement  
revised 1925. pam. 8o. *Lond.* 1925

Indexed list, of B.S. Specifications and Reports.  
pam. 8o. *Lond.* 1926

PRESENTED BY THE ASSOCIATION.

**British Society of Master Glass-Painters**

Journal, Nos. 2, 3 and 4. 8o. *Lond.* 1925

PRESENTED BY THE SOCIETY.

**Brussels**

CADÉMIE ROYALE DE BELGIQUE.

Annuaire. 8o. *Brussels* 1925

Bulletin de la Classe des Beaux Arts.  
8o. *Brussels* 1925-26

Bulletin de la Classe des Lettres et des Sciences  
Morales et Politiques. 8o. *Brussels* 1925-26

PRESENTED BY THE ACADEMY.

**SOCIÉTÉ CENTRALE D'ARCHITECTURE DE BELGIQUE.**

Exposition Internationale de l'art architectural au  
Palais d'Egmont, à Bruxelles.

1a. 4o. *Brussels* 1923

L'Emulation. 4o. *Brussels.* 1925-26

PRESENTED BY THE SOCIETY.

**UNION DES VILLES ET DES COMMUNES BELGE.**

Le mouvement communal. 4o. *Brussels* 1925-26

PRESENTED BY THE SOCIETY.

**Buenos Aires**

SOCIEDAD CENTRAL DE ARQUITECTOS.

Revista de arquitectura.

fo. *Buenos Ayres* 1925-26

PRESENTED BY THE SOCIETY.

**Burma**

ARCHÆOLOGICAL SURVEY.

Report 1925.

8o. *Rangoon* 1925

PRESENTED BY THE GOVERNMENT OF BURMA.

**Butler (C McArthur)**

The Society of Architects. 1884-1925.

8o. *Lond.* [1926]

PRESENTED BY THE AUTHOR [Lic.].

**Cape Town**

CAPE INSTITUTE OF ARCHITECTS.

Year book 1926-27. pam. 8o. *Cape Town* 1926

PRESENTED BY THE INSTITUTE.

**Casseres (J M De)**

Stedebouw.

4o. *Amsterdam* 1926

PRESENTED BY THE AUTHOR.

**Chancellor (E Beresford)**

The West End of yesterday and to-day.

4o. *Lond.* 1926

PRESENTED BY THE ARCHITECTURAL PRESS.

**Chatham**

INSTITUTE OF ROYAL ENGINEERS.

Journal.

8o. *Chatham* 1925-26

PRESENTED BY THE INSTITUTE.

**Clay (Felix)**

Modern school buildings.

1a. 8o. *Lond.* 1902

PRESENTED BY MR. C. F. A. VOYSEY.

**Clerk of Works Association of Great Britain**

Journal.

4o. *Lond.* 1925-26

PRESENTED BY THE ASSOCIATION.

**Colombo**

ARCHÆOLOGICAL SURVEY OF CEYLON.

Memoirs. Vol. 2, edited by A. M. Hocart.

4o. *Colombo* 1926

Report for 1924-25. Part IV. Education, Science,  
Art. fo. *Colombo* 1926

PRESENTED BY THE GOVERNMENT OF CEYLON.

ENGINEERING ASSOCIATION OF CEYLON.

Transactions for 1924.

8o. *Colombo* 1925

PRESENTED BY THE ASSOCIATION.



**Compendium Publishing Company**Architects' Compendium 1926. fo. *Lond.* 1926

PRESENTED BY THE PUBLISHERS.

**Connon (J W)**The legal registration of architects. 8o. *Leeds* 1888

PRESENTED BY MRS. CONNON.

**Consett Urban District Council**Preliminary report on internal improvement scheme  
by R. Hardy-Syms. 4o. *Lond.* [1925]

PRESENTED BY THE COUNCIL.

**Crow (Arthur)**The Clerks' Well. Notes on the ancient well and  
adjacent retaining wall of the Benedictine  
Nunnery of St. Mary, Clerkenwell; Fagge's well  
and Fackeswell Brook, Cow Cross, Smithfield.pam. 8o. *Lond.* 1925

PRESENTED BY THE AUTHOR [F.].

**Directory**Who's Who in architecture, edited by Frederick  
Chatterton. 3rd edition. 8o. *Lond.* 1926

PRESENTED BY THE ARCHITECTURAL PRESS.

**Dollman (F T)**Examples of ancient domestic architecture of the  
Middle Ages in England. 4o. *Lond.* 1858

PRESENTED BY SYDNEY F. BARTLEET [F.].

**Dorman, Long and Co.**Handbook for constructional engineers, containing  
tables relating to steel. 8o. *Lond.* 1924

PRESENTED BY THE COMPANY.

**Dublin**

INSTITUTION OF CIVIL ENGINEERS OF IRELAND.

Transactions, Vols. L and LI. 8o. *Dublin* 1925-26List of members. pam. 8o. *Dublin* 1925

PRESENTED BY THE INSTITUTION.

**ROYAL DUBLIN SOCIETY.**Scientific proceedings. 4o. *Dublin* 1925-26

PRESENTED BY THE SOCIETY.

**ROYAL SOCIETY OF ANTIQUARIES OF IRELAND.**Journal, Vol. LV, part 2. 8o. *Dublin* 1925

PRESENTED BY THE SOCIETY.

**Edinburgh**

INCORPORATION OF ARCHITECTS IN SCOTLAND.

Quarterly. 8o. *Edinburgh* 1925-26

PRESENTED BY THE SOCIETY.

**Emerson (Wm) and Gromort (Georges)**Old bridges of France. fo. *New York* 1925

PRESENTED BY PROF. WM. EMERSON, F.A.I.A.

**Empire Forestry Association**Journal, Vol. 5, No. 1. 8o. *Lond.* 1926

PRESENTED BY THE ASSOCIATION.

**Esdaile (K A)**

Roubiliac's work at Trinity College, Cambridge.

sm. 4o. *Lond.* 1924

PRESENTED BY THE CAMBRIDGE UNIVERSITY PRESS.

**Fenn (Amor)**Design and tradition. 8o. *Lond.* 1920

PRESENTED BY CHAPMAN &amp; HALL, THE PUBLISHERS.

**Garden Cities and Town Planning Association**

Garden Cities and Town Planning Journal.

4o. *Lond.* 1925-26

PRESENTED BY THE ASSOCIATION.

**Gotch (J A)**Old English houses. 8o. *Lond.* [1925]

PRESENTED BY CHARLES E. BARROW [Lic.].

**Great Britain**

WAR OFFICE.

Schedule of prices for works and repairs to buildings  
of the War Department. fo. *Lond.* 1925

PRESENTED BY THE WAR OFFICE.

**Halfpenny (William)**Practical architecture. 5th ed. sm. 8o. *Lond.* 1730

PRESENTED BY SYDNEY F. BARTLEET [F.].

**Hobson (J M)**Some early and late Houses of Pity. 8o. *Lond.* 1926PRESENTED BY GEO. ROUTLEDGE & SONS, LTD., THE  
PUBLISHERS.**Home Office**Factory and workshop. Statutory rules and orders  
1926, No. 738; being the building regulations  
1926, made under Section 79 of the Factories  
and Workshops Act, 1901. pam. 8o. *Lond.* 1926

PRESENTED BY THE HOME OFFICE.

**Hospital**

Architectural designs for a small hospital.  
4o. *Chicago* 1923

PRESENTED BY THE PUBLISHERS, "THE MODERN HOSPITAL."

**Hyderabad**

HYDERABAD ARCHEOLOGICAL DEPARTMENT.

Report. 1a. 4o. *Calcutta* 1926

Series No. 6. The Kotagiri plates of the reign of the  
Kakatiya Queen Rudramamba, A.D. 1273.  
4o. *Calcutta* 1925

Series 7. Bodhan stone inscription of the reign of  
Trailokyamalla (Somesvara I.), A.D. 1056.  
4o. *Calcutta* 1925

PRESENTED BY THE DEPARTMENT.

**Illuminating Engineering Society**

The Illuminating Engineer. 8o. *Lond.* 1925-26

PRESENTED BY THE SOCIETY.

**India**

ARCHEOLOGICAL SURVEY OF INDIA.

Annual Report, 1922-23. 4o. *Calcutta* [1925]  
——— 1923-24. 4o. *Calcutta* 1926

Memoirs, No. 15. The drawing of geometric patterns  
in Saracenic art by E. H. Hankin.  
fo. *Calcutta* 1925

Memoirs, No. 19. The Jami Masjid at Badaun and  
other buildings in the United Provinces by J. F.  
Blakiston. fo. *Calcutta* 1926

Memoirs, No. 20. The origin and cult of Tara by  
Hirananda Shastri. fo. *Calcutta* 1925

Memoirs, No. 22. The historical memoir on the  
Qutb-Delhi by J. A. Page. fo. *Calcutta* 1926

Memoir, No. 27. Pageant of King Mindon by Charles  
Duroiselle. fo. *Calcutta* 1925

Memoirs, No. 28. Bhasa and the authorship of the  
thirteen Trivandrum plays. fo. *Calcutta* 1926

PRESENTED BY THE GOVERNMENT OF INDIA.

**Institution of Civil Engineers**

List of Members, 1926. 8o. *Lond.* 1926

Minutes of proceedings, Vol. 220. 8o. *Lond.* 1925

PRESENTED BY THE INSTITUTION.

**Institution of Mechanical Engineers**

List of members, 1926. 8o. *Lond.* 1926

Proceedings, Vol. 1, 1925. 8o. *Lond.* [1925]

PRESENTED BY THE INSTITUTION.

**Institution of Municipal and County Engineers**

Journal. 4o. *Lond.* 1925-26

Handbook, 1926-27. 8o. *Lond.* 1926

PRESENTED BY THE INSTITUTION.

**Institution of Structural Engineers**

The Structural Engineer. 8o. *Lond.* 1925-26

Year book, 1926. 4o. *Lond.* 1926

PRESENTED BY THE INSTITUTION.

**International Garden Cities and Town Planning Federation**

Report of conference at Gothenburg, 1923.

4o. *Lond.* *n.d.*

PRESENTED BY THE GARDEN CITIES AND TOWN PLANNING  
ASSOCIATION.

**Iron and Steel Institute**

Journal, Vols. CXI, CXII. 8o. *Lond.* 1925

PRESENTED BY THE INSTITUTE.

**Jackson (Sir T. G)**

Architecture. 1a. 8o. *Lond.* 1925

PRESENTED BY B. H. JACKSON [A.].

**Johannesburg**

ASSOCIATION OF TRANSVAAL ARCHITECTS.

The South African Architectural Record.

4o. *Johannesburg* 1925-26

PRESENTED BY THE ASSOCIATION.

**Johnson (J)**

Reliques of ancient English architecture.

fo. *Lond.* [1857]

PRESENTED BY SYDNEY F. BARTLEET [F.].



**Journal**

- American Architect, 1925-26.  
 American Magazine of Art, 1925-26.  
 Architect, 1925-26.  
 Architects' Journal, 1925-26.  
 Architectural Forum (America), 1925-26.  
 Architectural Record (America), 1925-26.  
 Architectural Review, 1925-26.  
 Architecture (America), 1925-26.  
 Architecture, 1925-26.  
 Brick Builder, 1925-26.  
 British Clayworker, 1925-26.  
 Builder, 1925-26.  
 Building, 1925-26.  
 Building (Australia), 1925-26.  
 Building News, 1925-March, 1926.  
 Civil Engineering, 1925-26.  
 Concrete, 1925-26.  
 Construction (Canada), 1925-26.  
 Country Life, 1925-26.  
 Ferro-Concrete, 1925-26.  
 Ideal Home, 1925-26.  
 Illustrated Carpenter and Builder, 1925-26.  
 Irish Builder and Engineer, 1925-26.  
 La Construction moderne, 1925-26.  
 Master Builder, 1925-26.  
 Municipal Engineering, 1925-26.  
 Pacific Coast Architect, 1925-26.  
 Pencil Points, 1925-26.  
 Rupam, Nos. 24, 25.  
 Specification, No. 28, 1926.  
 Stone, 1925-26.  
 Studio, 1925-26.  
 Teknisk Ukeblad (Oslo), 1925-26.  
 Wasmuth's Monatshefte für Baukunst (Germany), 1926.  
 Quarry, 1925-26.

PRESENTED BY THE EDITORS AND PROPRIETORS.

- Architecture, Vols. 1 and 2. fo. *Lond.* 1896-97  
 Architectural Review, Vols. 1, 2, 3, 4, 5, 6, 9, 10 (8 vols. in 4). fo. *Lond.* 1897-1899 & 1901  
 PRESENTED BY MR. CHAS. A. DAUBNEY [F.].

- Academy Architecture, Vol. 57. 4o. *Lond.* 1926  
 PRESENTED BY MR. A. E. MARTIN-KAYE.

- Vient de Paraître ; numéro spéciale ; L'Exposition Internationale des Arts Décoratifs et Industriels Modernes, 1925. 4o. *Paris* 1925  
 PRESENTED BY A. ZWEMMER.

**Junior Institution of Engineers**

- Journal and record of transactions, 1924-25. 8o. *Lond.* 1925  
 PRESENTED BY THE INSTITUTION.

**Kettridge (S O)**

- Technical dictionary, French-English and English-French. 1a. 8o. *Lond.* 1925  
 PRESENTED BY THE AUTHOR.

**Land Agents Society**

- Journal. 8o. *Lond.* 1925-26  
 PRESENTED BY THE SOCIETY.

**Leeds**

- YORKSHIRE ARCHÆOLOGICAL SOCIETY.  
 Journal, Part 112. 8o. *Leeds* 1926  
 PRESENTED BY THE SOCIETY.

**Letarouilly (P)**

- Edifices de Rome Moderne (imperfect, 174 plates in 1 vol.). fo. *Paris* 1840-60  
 PRESENTED BY SYDNEY F. BARTLEET [F.].

**Lewes**

- SUSSEX ARCHÆOLOGICAL SOCIETY.  
 Collections. Vol. 77. 8o. *Cambridge* 1926  
 PRESENTED BY THE SOCIETY.

**Liverpool**

- LIVERPOOL ARCHITECTURAL SOCIETY.  
 Kalendar 1925. 8o. *Liverpool* 1925  
 PRESENTED BY THE SOCIETY.

**Lloyd (Nathaniel)**

- History of English brickwork. 1a. 4o. *Lond.* 1925  
 PRESENTED BY THE AUTHOR.

**London**

- Devonshire House, Piccadilly. 4o. *Lond.* 1925  
 PRESENTED BY PROFESSOR C. H. REILLY [F.].

**London Master Builders' Association**

- The Master Builders' handbook and diary, 1926. 8o. *Lond.* 1926  
 PRESENTED BY THE ASSOCIATION.

**London Society**

- Journal. 8o. *Lond.* 1925-26  
 PRESENTED BY THE SOCIETY.

**Mackmin (H A)**

- Builders' estimates and pricing data, their preparation and analysis. 8o. *Lond.* 1926  
 PRESENTED BY THE AUTHOR [F.S.I.].

**Madrid**

SOCIEDAD CENTRAL DE ARQUITECTOS.

Arquitectura. 4o. *Madrid* 1925-26

PRESENTED BY THE SOCIETY.

**Manchester**

MANCHESTER LITERARY AND PHILOSOPHICAL SOCIETY.

Memoirs and proceedings. 8o. *Manchester* 1925-26

PRESENTED BY THE SOCIETY.

**Margate**

QUATUOR CORONATI LODGE.

Ars quatuor coronatorum. Vol. 36.

sm. fo. *Margate* 1923

PRESENTED BY THE LODGE.

**Maynard (D C)**

The old inns of Kent.

8o. *Lond.* [1925]

PRESENTED BY THE AUTHOR [A.].

**Melbourne**

ROYAL VICTORIA INSTITUTE OF ARCHITECTS.

Journal. sm. 4o. *Melbourne* 1925-26

PRESENTED BY THE INSTITUTE.

**Mieras (J P) and Yerbury (F R)**

Dutch architecture of the XXth century.

4o. *Lond.* 1926

PRESENTED BY ERNEST BENN, LTD., THE PUBLISHERS.

**Milan**

ASSOCIAZIONE ARTISTICA FRA I CULTORI D'ARCHITETTURA.

Architettura e arti decorative, 1925-26.

fo. *Milan* 1925-26Annuario. 4o. *Milan* 1926

PRESENTED BY THE SOCIETY.

**Montevideo**

SOCIEDAD DE ARQUITECTOS.

Arquitectura. fo. *Montevideo* 1925-26

PRESENTED BY THE SOCIETY.

**National Federation of Building Trades Employers**

The National Builder.

fo. *Lond.* 1925-26

PRESENTED BY THE ASSOCIATION.

**National Fire Brigades Association**

Red book No. 241. Fire tests with wired glass.

8o. *Lond.* 1925

PRESENTED BY THE ASSOCIATION.

**National Housing and Town Planning Council**

Report of a Sub-Committee appointed to interview the State Inspector of Housing at The Hague for information in reference to State-aided Housing Schemes. MS. fo. [1925]

PRESENTED BY MR. T. ALWYN-LLOYD [F.].

**Newcastle-upon-Tyne**

Armstrong College. Calendar 1926-27.

8o. *Newcastle-upon-Tyne* 1926

PRESENTED BY THE COLLEGE.

**New York**

AMERICAN SOCIETY OF CIVIL ENGINEERS.

Proceedings.

8o. *New York* 1925-26

PRESENTED BY THE SOCIETY.

**NATIONAL TERRA COTTA SOCIETY.**

Terra Cotta of the Italian Renaissance.

4o. *New York* [1925]

PRESENTED BY THE SOCIETY.

**Noppen (T G)**

Westminster Abbey and its ancient art.

4o. *Lond.* [1926]

PRESENTED BY E. J. BURROW &amp; Co., CHELTENHAM.

**Nottingham**

NOTTINGHAM AND DERBY ARCHITECTURAL SOCIETY.

List of members and annual report.

pam. 8o. *Nottingham* 1926

PRESENTED BY THE SOCIETY.

**Office of Works**

Photographs illustrating the historical section of the Report on Westminster Hall Roof.

1a. 4o. [*Lond.* 1914]

PRESENTED BY SIR FRANK BAINES, [F.], C.V.O., C.B.E.

**Palladio (A)**

The five orders of architecture, revised by Colin Campbell. 8o. *Lond.* 1729

PRESENTED BY SYDNEY F. BARTLEET [F.].

**Parent (Paul)**

L'architecture des Pays-Bas Méridionaux (Belgique et Nord de la France) aux XVI<sup>e</sup>, XVII<sup>e</sup> et XVIII<sup>e</sup> siècles. 4o. *Paris* 1926

PRESENTED BY G. VAN. OEST, THE PUBLISHER.



**Paris**

INSTITUT DE FRANCE.

Académie des Beaux-Arts, Bulletin No. 1. Janvier-  
Juin 1925. sm. 4o. *Paris* 1925

PRESENTED BY THE PUBLISHER.

SOCIÉTÉ CENTRALE DES ARCHITECTES.

L'Architecture. 4o. *Paris* 1925-26Le Petite Architecture. 4o. *Paris* 1925-26

PRESENTED BY THE SOCIETY.

SOCIÉTÉ DES ARCHITECTES DIPLÔMÉS PAR LE GOUVERNE-  
MENT.Annuaire 1926. pam. 8o. *Paris* 1926Bulletin. pam. 8o. *Paris* 1925-26

PRESENTED BY THE SOCIETY.

**Pierce (S Rowland)**The mausoleum of Hadrian and the Pons Aelius.  
1a. 8o. *Lond.* 1925PRESENTED BY THE AUTHOR; ROME SCHOLAR IN ARCHI-  
TECTURE, 1921.**Pierce (S Rowland) and Pace (Biagio)**Il tempio di Giove Olimpico a Girgenti, Sicilia.  
fo. *Rome* 1924Il tempio di Giove Olimpico in Agrigento.  
(2 pamphlets in 1 vol.) fo. *Rome* 1922PRESENTED BY S. ROWLAND PIERCE, ROME SCHOLAR IN  
ARCHITECTURE, 1921.**Pond (Irving K)**The meaning of architecture. 8o. *Boston, N.Y.* 1918

PRESENTED BY THE AUTHOR, F.A.I.A.

**Rice-Oxley (L)**Oxford renowned. 8o. *Lond.* [1925]

PRESENTED BY METHUEN &amp; CO., THE PUBLISHERS.

**Richmond (E T)**The Dome of the Rock in Jerusalem.  
1a. 4o. *Oxford* 1924

PRESENTED BY THE OXFORD UNIVERSITY PRESS.

**Riviera (G T)**Roman architecture and its principles of construction  
under the Empire with an appendix on the  
evolution of the dome up to the XVIIIth century.  
4o. *Lond.* 1925

PRESENTED BY THE CLARENDON PRESS, OXFORD.

**Robertson (Howard)**Architecture explained. 8o. *Lond.* 1926

PRESENTED BY ERNEST BENN, LTD., THE PUBLISHERS.

**Robinson (P F)**Vitruvius Britannicus. History of Woburn Abbey,  
Bedfordshire. fo. *Lond.* 1833

PRESENTED BY J. S. NAYLOR [F.].

**Rome**

COMMISSIONE ARCHEOLOGICA COMUNALE.

Bulletino, vol. lii (1924), Parts i-iv. 1a. 8o. *Rome* 1925

PRESENTED BY THE COMMISSIONE.

MINISTERO DELLA PUBBLICA ISTRUZIONE.

*Elenco degli edifici monumentali :*Provincia di Cagliari. sm. 8o. *Rome* 1922Provincia di Chieti. sm. 8o. *Rome* 1921Provincia di Macerata. sm. 8o. *Rome* 1923Provincia di Sassari. sm. 8o. *Rome* 1922Provincia della Spezia. sm. 8o. *Rome* 1924

PRESENTED BY COMMENDATORI E. CANZIANI.

**Royal Academy of Arts**[Catalogue of the] Exhibition of works by the late  
John S. Sargent, R.A. sm. 8o. *Lond.* 1926

PRESENTED BY THE PRESIDENT AND COUNCIL.

**Royal Institution of Great Britain**Proceedings, Vol. XXIV, part 3. 8o. *Lond.* 1925

PRESENTED BY THE INSTITUTION.

**Royal Institute of British Architects**INTERNATIONAL CONGRESS ON ARCHITECTURAL EDUCA-  
TION, 1924.Proceedings. 4o. *Lond.* 1924**Royal Sanitary Institute**Jubilee retrospect of the Royal Sanitary Institute,  
1876-1926, compiled by Louis C. Parkes, M.D.8o. *Lond.* 1926Journal. 8o. *Lond.* 1925-26

PRESENTED BY THE INSTITUTE.

**Royal Society of Arts**Journal 1925-26 8o. *Lond.* 1925-26Report on the competition of industrial designs, 1926.  
pam. 8o. *Lond.* 1926

PRESENTED BY THE SOCIETY.

**Salisbury, Rhodesia**

RHODESIAN SOCIETY OF ARCHITECTS.

Year book, 1925 and 1926. pam. 8o. *Salisbury* 1925

PRESENTED BY THE SOCIETY.

**Salwey (Jasper)**

Sketching in lead pencil for architects and others.

8o. *Lond.* 1926

PRESENTED BY THE AUTHOR [A.].

**Scientific and Industrial Research Department**Building Research Technical Paper No. 3. The permeability of Portland Cement concrete, by W. H. Glanville. pam. 8o. *Lond.* 1926The building research station. pam. 8o. *Lond.* 1926

PRESENTED BY THE DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH.

Building Research bulletins. No. 1: Jointless (Magnesium Oxychloride) Floors, by P. W. Barnett and B. Bakewell. pam. 8o. *Lond.* 1925

PRESENTED BY THE DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH.

**Sheffield**

UNIVERSITY OF SHEFFIELD.

Calendar, 1925-26. 8o. [*Sheffield* 1925]

PRESENTED BY THE REGISTRAR.

**Smith (A F)**

English church architecture of the middle ages.

sm. 8o. *Lond.* [1922]

PRESENTED BY T. FISHER UNWIN, LTD., THE PUBLISHERS.

**Society of Antiquaries**

Archaeologia. 2nd Series. Vol. XXIV.

fo. *Lond.* 1925Journal. la. 8o. *Lond.* 1925-26

PRESENTED BY THE SOCIETY.

**Society of Antiquaries**

Vetusta Monumenta. Vol. V, plates 33-60: Tewkesbury Abbey and St. Mary's Abbey, York.

fo. *Lond.* 1821-29

PRESENTED BY J. S. NAYLOR [F.].

**Society of Engineers**

Transactions for 1925.

8o. *Lond.* 1925

PRESENTED BY THE SOCIETY.

**Society for the Protection of Ancient Buildings**

Annual report.

pam. 8o. *Lond.* 1926

PRESENTED BY THE SOCIETY.

**Society for the Promotion of Hellenic Studies**

Journal, Vol XLV, part 2, and Vol. XLVI, part 1.

8o. *Lond.* 1925 and 1926

PRESENTED BY THE SOCIETY.

**St. Paul's Ecclesiological Society**

Transactions Vol. IX, parts 2-4

4o. *Lond.* 1926

PRESENTED BY THE SOCIETY.

**Stockholm**

INGENIÖRS VETENSKAPS AKADEMIEN.

Handlingar, Nos. 31-48

8o. *Stockholm* 1924-26

PRESENTED BY THE ACADEMY.

**Surveyors' Institution**

List of Members, 1926.

8o. *Lond.* 1926

Journal.

8o. *Lond.* 1925-26

Rating and Valuation Act 1925.

8o. *Lond.* 1926

PRESENTED BY THE INSTITUTION.

**Sydney, N.S.W.**

INSTITUTE OF ARCHITECTS OF NEW SOUTH WALES.

Architecture.

4o. *Sydney* 1925-26

PRESENTED BY THE INSTITUTE.

**Tokyo**

TOKYO IMPERIAL UNIVERSITY.

Calendar, 1924-25.

8o. *Tokyo* [1924]

PRESENTED BY THE UNIVERSITY.

INSTITUTE OF JAPANESE ARCHITECTS.

Journal.

la. 8o. *Tokyo* 1925-26

PRESENTED BY THE INSTITUTE.

**Town Planning Institute**

Journal.

4o. *Lond.* 1925-26

PRESENTED BY THE INSTITUTE.

**Traquair (Ramsay)**

The cottages of Quebec.

pam. 8o. *Montreal* 1926

PRESENTED BY THE AUTHOR [F.], MACDONALD PROFESSOR OF ARCHITECTURE, MCGILL UNIVERSITY, MONTREAL.

**Unwin (Raymond)**

Methods of decentralization.

pam. 8o. n.p. [1925]

PRESENTED BY THE AUTHOR [F.].



**Victoria and Albert Museum**

Review of the principal acquisitions during the years  
1921, 1922 and 1923. 4o. *Lond.* 1925-26

PRESENTED BY THE DIRECTOR AND SECRETARY OF THE  
MUSEUM.

**Vienna**

OSTERR. INGENIEUR-UND-ARCHITEKTEN-VEREINES.

Zeitschrift. 4o. *Vienna* 1925-26

PRESENTED BY THE SOCIETY.

**Wellington**

NEW ZEALAND INSTITUTE OF ARCHITECTS.

Journal. 4o. *Wellington* 1925-26

PRESENTED BY THE INSTITUTE.

**Voss (W C) and Henry (R C)**

Architectural construction, Volume 1; an analysis  
of the design and construction of American  
buildings based upon the actual working docu-  
ments of recent examples. 1a. 4o. *New York* 1925

PRESENTED BY CHAPMAN & HALL, THE LONDON PUBLISHERS.

**Washington**

AMERICAN INSTITUTE OF ARCHITECTS.

Annuary, 1925-26. 4o. *Washington* 1925

Journal. 8o. *Washington* 1925-26

PRESENTED BY THE INSTITUTE.

**PURCHASED.****Albert (P P) and Wigenroth (Max)**

Frieburger Bürgerhauser aus Vier Jahrhunderten.  
1a. 4o. *Stuttgart* 1923

**Alexander (H B) Cram (R A) and Others**

Bertram Grosvenor Goodhue, architect and master  
of many arts. fo. *New York* 1925

**Andrews (E S)**

Regulations of the London County Council relating  
to reinforced concrete and steel framed buildings.  
2nd ed. 8o. *Lond.* 1924

**Augros (Paul)**

Béton armé, possibilités techniques et architecturales.  
sm. fo. *Paris*, n.d.

**Baer (C H)**

Kleinbauten und Siedelungen. 4o. *Stuttgart* n.d.

**Ballu (Albert)**

Monastère byzantin de Tébessa. fo. *Paris* 1897

**Beckett (Francis) and Jensen (Axel)**

Gammel Dansk kunst bygninger og kunsthånd-  
værk. 4o. *Copenhagen* 1921

**Bell (Edward)**

Prehellenic architecture in the Aegean.  
8o. *Lond.* 1926

**Berlepsch-Valendas**

Die Garten-Stadt München-Verlach.  
8o. *Munich* 1910

**Blake (E G)**

Enemies of timber, dry rot and the death-watch  
beetle. 8o. *Lond.* 1925

**Bodington (O E)**

Romance churches of France. 8o. *Lond.* 1925

**Boerschmann (Ernst)**

Chinesische Architektur, 2 vols. 1a. 4o. *Berlin* 1925

**British School of Archæology in Egypt**

Tombs of the Courtiers and Oxyrhynchos, by Flinders  
Petrie, Alan Gardiner and others. fo. *Lond.* 1925

**Bullet (P)**

Schoorsteen mantels nieuwlykx geinventeert.  
fo. *Amsterdam* n.d.

(Bound up with S. Bosboom: Cort onderwys van de  
vyf colomen.)

**Chamberlain (Samuel)**

Sketches of Northern Spanish architecture.  
sm. fo. *New York* n.d.

**Colasanti (A)**

Luciano Laurana. 4o. *Rome* n.d.

**Cox (H. Bartle)**

Ange-Jacques Gabriel (1698-1782.)  
sm. 4o. *Lond.* 1926

**Cox (J C)**

- County churches : Cumberland and Westmorland. 80. *Lond.* 1913  
 ——— : Norfolk, Vol. 2. 80. *Lond.* 1911

**Clouzot (H)**

- Ferronnerie moderne. fo. *Paris* 1925

**Curzon (G N) Marquis Curzon of Kedleston**

- Bodiam castle. 40. *Lond.* 1926

**Danckers (Justus)**

- Architectura chivilis, Cappen, Toorens, Kercke, Huysen, etc., en eenige Wenteltrappe. sm. fo. *Amsterdam* n.d.  
 (Bound up with S. Bosboom : Cort onderwys van de vyf colomen.)

**Danckerts (Cornelis)**

- Architecture poorten of deuren van Huisen, etc. fo. *Amsterdam* n.d.  
 (Bound with S. Bosboom : Cort onderwys van de vyf colomen.)

**Danckerts (Cornelis)**

- [Nineteen plates of the Town Hall and other buildings in Amsterdam.] fo. *Amsterdam* n.d.  
 (Bound up with S. Bosboom : Cort onderwys van de vyf colomen.)

**Daubeny (Ulric)**

- Ancient Cotswold churches. 40. *Cheltenham* 1921

**Dervaux (Adolphe)**

- L'architecture étrangère à L'Exposition Internationale des Arts Décoratifs et Industriels Modernes. fo. *Paris* [1925]

**Deshairs (Leon)**

- Intérieurs en couleurs à L'Exposition des Arts Décoratifs Paris, 1925. fo. *Paris* 1925

**Dufrene (Maurice)**

- Ensembles mobiliers, Exposition Internationale, 1925. 3 vols. fo. *Paris* 1925

**Dupezard (E)**

- Le palais-royal de Paris, architecture et décoration de Louis XV à nos jours. fo. *Paris* 1911

**Durer (Albrecht)**

- Choix de cinquante dessins de A.D. 40. *Paris* 1925

**Enlart (Camille)**

- La renaissance en France ; l'architecture et la décoration. 2nd series, part 2. fo. *Paris* [1922]

**Faber (Oscar)**

- Reinforced concrete simply explained. 80. *Lond.* [1922]  
 Simple examples of reinforced concrete design. 80. *Lond.* 1924

**Faber (Oscar) and Childe (H L) Editors**

- The concrete year book 1926. 80. *Lond.* [1925]

**Fishenden (Margaret)**

- House heating, a general discussion on the relative merits of coal, gas, electricity, etc. 40. *Lond.* 1925

**Esquié (Pierre)**

- The five orders of architecture according to Vignola, arranged by Pierre Esquié, with explanatory notes of the plates and a glossary of French and English terms by Arthur Stratton. 1a. 40. *Lond.* [1926]

**Gardiner (E N)**

- Olympia, its history and remains. 40. *Lond.* 1925

**Gardner (E A)**

- Art of Greece. 80. *Lond.* 1925

**Gardner (Percy)**

- New chapters in Greek art. 80. *Lond.* 1926

**Gatteschi (Giuseppe)**

- Restauri della Roma Imperiale. ob. fo. *Rome* 1924

**Gobel (H)**

- Süddeutsche Bürgerhaus. text, 40. *Dresden* 1908  
 plates, fo. *Dresden* 1908

**Grayling (Francis)**

- County churches : Kent. 2 vols. 80. *Lond.* 1913

**Grober (Karl)**

- Picturesque Palestine, Arabia and Syria. 40. *Lond.* [1925]

**Grober (Karl)**

- Sicilia. 40. *Augsburg* 1924



- Gromort (Georges)**  
Choix de plans de grandes compositions exécutées.  
Présentant, avec leurs jardins ou leur entourage,  
une série d'ensembles de l'antiquité, de la renaissance  
et des temps modernes.  
2nd ed. fo. *Paris* 1925
- Gromort (Georges)**  
Jardins d'Espagne. 2 vols. fo. *Paris* 1926
- Haupt (Albrecht)**  
Baukunst der Renaissance in Frankreich und Deutschland.  
Vol. 1. 4o. *Berlin* 1923
- Havell (E B)**  
The Himalayas in Indian art. 8o. *Lond.* 1924
- Hempel (E)**  
Carlo Rainaldi. 4o. *Rome* n.d.
- Hoffmann (Richard)**  
Michelangelo; die Decke der Sixtinischen Kapelle.  
4o. *Augsburg* 1925
- Hopkins (Alfred)**  
Modern farm buildings. 4o. *New York* 1920
- Huth (Hans)**  
Künstler und Werkstatt der Spätgotik.  
4o. *Augsburg* 1923
- Huxley (Aldous)**  
Along the road. 8o. *Lond.* 1925
- Ivekovic (C M)**  
Dalmatiens Architektur und Plastik, parts 6-8  
fo. *Vienna* [1926]
- James (C H) and Yerbury (F R)**  
Modern English houses and interiors. 4o. *Lond.* 1925
- Journals**  
Arquitectura Española. fo. *Madrid* 1925-26  
Burlington Magazine. fo. *Lond.* 1925-26  
Dedalo. 1a. 4o. *Milan* 1925-26  
Der Städtebau. fo. *Berlin* 1925  
Gazette des Beaux Arts 4o. *Paris* 1925-26  
L'Architecture vivante. 4o. *Paris* 1925-26  
Les salons d'architecture, 1924, 1925.  
8o. *Paris* 1924-25  
Wasmuth's Monatshefte für Baukunst.  
fo. *Berlin* 1925-26
- Karlinger (Hans)**  
Romanische Steinplastik in Altbayern und Salzburg  
1050-1260. 4o. *Augsburg* 1924
- Kent (W W)**  
Life and works of Baldassare Peruzzi.  
8o. *New York* [1925]
- Kiessling (Martin)**  
Ostmarkbauten, Städtebau in einer Mittelstadt.  
4o. *Stuttgart* 1925
- Kingsford (C L)**  
Early history of Piccadilly, Leicester Square, Soho  
and their neighbourhood. 8o. *Cambridge* 1925
- Klotzbach (P) Editor**  
Die schöne Haustüre am Niederrhein.  
sm. fo. *Elberfeld* [1925]
- Lakeman (Albert)**  
Elementary guide to reinforced concrete.  
8o. *Lond.* 1925
- Law and Law Reports**  
Annual digests of *The Times* Law Reports. Vols.  
31-41. 4o. *Lond.* 1915-1925
- Le Corbusier (—)**  
Vers une architecture. 8o. *Paris* n.d.
- Lefol (Gaston)**  
Hôtels et hôtelleries. fo. *Paris* [1925]
- Lethaby (W R)**  
Westminster Abbey re-examined. 8o. *Lond.* 1925
- London County Council**  
Survey of London, Vol. 1, The Parish of Bromley-by-Bow,  
by C. R. Ashbee. 4o. *Lond.* 1900  
Survey of London, Vol. X. The Parish of St. Margaret,  
Westminster. Part 1, by G. Topham Forrest and  
Montague H. Cox. 4o. *Lond.* 1926
- London Survey Committee**  
Vol. 8. Sandford Manor, Fulham, by W. Arthur Webb.  
4o. [*Lond.* 1907]

**Luckiesh (M)**

Colour and its applications. 2nd ed.  
1a. 8o. *New York* 1921

**Marmottan (Paul)**

Le Style Empire, architecture et décors d'intérieurs,  
Vol. 3. fo. *Paris* 1925

**Marshall (Walter)**

Brief notes on the architecture of the Church of St.  
Mary de Haura, New Shoreham, Sussex.  
pam. 8o. n.p. 1915

**Meille (G E)**

L'immagine di Gesù nella storia e nell'arte.  
4o. *Milan* n.d.

**Middleton (G A T)**

Stresses and thrusts. 4th ed. 8o. *Lond.* 1911

**Ministry of Health**

Model specification for water pipes and fittings.  
8o. *Lond.* 1926  
Water pipes and fittings: report. 8o. *Lond.* 1926  
Town planning, model clauses for use in the prepara-  
tion of schemes. fo. *Lond.* 1926

**Mitchell (C F and G A)**

Building construction, elementary course.  
8o. *Lond.* [1925]  
———, advanced course. 8o. *Lond.* 1925

**Molesworth (H B)**

Obstruction to light. 4o. *Lond.* 1902

**Morison (Douglas)**

Views of Haddon Hall. fo. *Lond.* 1842

**Muirhead (F) and Monmarché (M)**

Brittany. sm. 8o. *Lond.* 1925  
Normandy. sm. 8o. *Lond.* 1925  
Southern France. sm. 8o. *Lond.* 1926

**Muñoz (Antonio)**

Carlo Maderno. 4o. *Rome* n.d.

**Newton (W G)**

Prelude to architecture. sm. 8o. *Lond.* 1925  
The work of Ernest Newton, R.A. 1a. 4o. *Lond.* 1925

**Oman (Charles)**

Castles. 4o. *Lond.* 1926

**Parent (Paul)**

L'architecture des Pays-Bas Méridionaux (Belgique  
et Nord de la France) aux XVI<sup>e</sup>, XVII<sup>e</sup>, et  
XVIII<sup>e</sup> siècles. 1a. 4o. *Paris* 1926

**Paris**

ÉCOLE NATIONALE DES BEAUX-ARTS  
Les médailles des concours d'architecture, 4 vols.  
fo. *Paris* 1902-1906

**ÉCOLE NATIONALE SUPÉRIEURE DES BEAUX-ARTS**

Concours d'architecture 1913-14.  
Concours d'architecture 1917-18.  
Concours d'architecture 1918-19.  
Concours d'architecture 1924-25.

**ÉCOLE NATIONALE ET SPÉCIALE DES BEAUX-ARTS.**

Grand Prix de Rome d'architecture 1925.  
fo. *Paris* [1925]

**EXPOSITION INTERNATIONALE DES ARTS DÉCORATIFS**

1925.  
Devantures, vitrines, installations de magasins.  
fo. *Paris* 1925

**Patout (P)**

L'architecture officielle et les pavillons à l'Exposition  
Internationale des Arts Décoratifs, Paris, 1925  
fo. *Paris* 1925

**Peirce (Hayford) and Tyler (Royall)**

Byzantine art. sm. 4o. *Lond.* 1926

**Pettorelli (Arturo)**

Il bronzo e il rame nell'arte decorativa Italiana.  
sm. fo. *Milan* n.d.

**Pichel (Irving)**

Modern theatres. 8o. *New York* [1925]

**Plantenga (J H)**

L'architecture religieuse du Brabant au XVII<sup>e</sup> siècle  
(1598-1713). 1a. 4o. *La Haye* 1926

**Pond (I K)**

The meaning of architecture. 8o. *Boston* 1918



**Price Book**

Laxton's and Lockwood's builders' price book,  
1926. 80. *Lond.* 1926

**Quibell (A A)**

A wayfarer in Egypt. 80. *Lond.* 1925

**Rapin (Henri)**

Sculpture décorative moderne (à l'Exposition Inter-  
nationale, Paris, 1925), 2 vols. fo. *Paris* 1925

**Richardson (A E) and Eberlein (H D)**

Smaller English house of the later renaissance,  
1660-1830. 40. *Lond.* [1925]

The English inn, past and present. 40. *Lond.* [1925]

**Rivoira (G T)**

Roman architecture and its principles of construction  
under the Empire, with an appendix on the  
evolution of the dome up to the eighteenth  
century. 40. *Oxford* 1925

**Robertson (Manning)**

Laymen and the new architecture. 80. *Lond.* [1925]

**Rosenberg (L C)**

Davanzati Palace, Florence. 1a. 40. *New York* 1922

**Rossi (G G de)**

Insignium Romae templorum prospectus exteriores  
interioresque a celebrioribus architectis inventi.  
fo. *Rome* 1684

Disegni di vari altari e capelle nelle chiese di Roma  
con le loro facciate fianchi piante e misure de  
piu celebri architetti. (*Two works in one volume.*)  
fo. *Rome* [1713]

**Roux-Spitz (M)**

Bâtiments et jardins à l'Exposition des Arts Décoratifs,  
Paris, 1925. 1a. 40. *Paris* 1925

**Royal Commission on Historical Monuments**

London. Vol. 2. West London. 40. *Lond.* 1925

**Salwey (Jasper)**

Art of drawing in lead pencil. 2nd ed.  
80. *Lond.* [1925]

**Scamozzi (Vincenzo)**

Cort onderwys van de vyf colomen door S. Bosboom  
... vyt ... V. Scamozzi. fo. *Amsterdam* 1686

**Schumacher (Fritz)**

Hamburger Staatsbauten, Vol. 2. 40. *Berlin* 1921

**Seely (F B)**

Resistance of materials. 80. *Lond.* 1925

**Selmersheim (Pierre)**

L'architecture à l'exposition des arts décoratifs  
modernes de 1925: Le village moderne, les con-  
structions régionalistes et quelques autres  
pavillons. sm. fo. *Paris* 1925

**Shepherd (J C) and Jellicoe (G A)**

Italian gardens of the Renaissance. fo. *Lond.* 1925

**Society for the Promotion of Roman Studies**

Journal, Vol. XIV, parts 1 and 2. 1a. 80. *Lond.* [1925]

**Soulange-Bodin (H)**

Les anciens châteaux de France—L'Ile-de-France  
Abondant—Athis—Maintenon—Sucy-en-Brie—  
Suisnes fo. *Paris* 1925

**Stratton (Arthur)**

Elements of form and design in Classic architecture.  
1a. 40. *Lond.* 1925

**Sullivan (Louis H)**

The autobiography of an idea. 80. *New York* 1926

**Supino (J B)**

Jacopo dalla Quercia. 1a. 40. *Bologna* 1926

**Tipping (H Avvay)**

English gardens. fo. *Lond.* 1925  
English homes—Late Georgian 1760-1820.  
fo. *Lond.* 1926

**Thompson (A H)**

Cathedral churches of England. 80. *Lond.* 1925

**Vacquier (J)**

Les vieux hôtels de Paris—Le faubourg Saint-Germain.  
Tome vi. 16ème série. fo. *Paris* 1924

Le Style Empire, décorations extérieures et intérieures,  
mobilier, bronzes, Vols. 1 and 2.  
fo. *Paris* 1920-24

**Venturi (Adolfo)**

Storia dell'arte Italiana, Vol. VIII, part 2, L'architettura del Quattrocento. 1a. 8o. *Milan* 1924

**Wackernagel (Martin)**

Baukunst des 17 und 18 Jahrhunderts in den Germanischen Ländern. 4o. *Berlin* [1915]

**Weese (Artur and Maria)**

Ancienne Suisse, villes, édifices et intérieurs. 4o. *Zurich* 1925

**Wren Society**

Vols. 2 & 3, St. Paul's cathedral, original Wren drawings from the collection in the Library of St. Paul's cathedral. 1a. 4o. *Oxford* 1925

**DRAWINGS, PRINTS, ETC.****Bodiam**

Measured drawings of the castle, 13 sheets, by J. Tavernor Perry, redrawn with additions and corrections by Sidney Toy [*F.*].  
PRESENTED BY HAROLD SANDS, ESQ., F.S.A.

**London**

Admiralty, Whitehall, view.	p. [1925]
Lambeth Palace, view.	p. [1925]
Queen Anne's Gate, doorway.	p. [1925]
St. James' Palace, gateway.	p. [1925]
Staple Inn, detail.	p. [1925]
Westminster Abbey, western towers.	p. [1925]

PRESENTED BY L. A. HAYES [*A.*].

**London Topographical Society**

Drawings of buildings described in "The early history of Piccadilly, Leicester Square and Soho, by C. L. Kingsford." 8 sheets, 4o. *Lond.* 1926

**Oxford**

Jesus College. E. H. New delt. E. 1925.

**Portraits**

Davidson (James). photograph  
PRESENTED BY MR. HUGH McLACHLAN.  
Chambers (Sir Wm.) from the painting by Sir Joshua Reynolds in the Brussels Museum. p.  
PRESENTED BY MONS. ADRIEN DELPY (HON. CORR. MEM.).

**Raynham Hall**

Plans, elevations, sections. 11 sheets. c. 1685  
PRESENTED BY LEONARD BOLINGBROKE, F.S.A.

**Romsey**

Abbey, Choir, plans, elevations and sections. 5 sheets, Hugh MacLachlan delt. D.  
Doorway in South Aisle, plan, elevation and sketch of capitals. 2 sheets, Hugh MacLachlan delt. D.  
PRESENTED BY MR. HUGH McLACHLAN, GODWIN BURSAR 1883.

**Wyatt (M D)**

Design for a candelabra presented to J. J. Mechi, Sheriff of London, 1857.  
PRESENTED BY DIGBY SOLOMON [*F.*].

**Loan Library.****Abercrombie (Patrick)**

The preservation of rural England. 4o. *Liverpool* 1926  
PRESENTED BY THE UNIVERSITY PRESS, LIVERPOOL.

**Abercrombie (P) and Archibald (J)**

East Kent regional planning scheme; preliminary survey. 1a. 4o. *Liverpool & Lond.* 1925  
PRESENTED BY THE UNIVERSITY PRESS OF LIVERPOOL.

**Bankart (G P) and Bankart (C E)**

Modern plasterwork construction. fo. *Lond.* 1926  
PRESENTED BY THE ARCHITECTURAL PRESS.

**Birnstingl (H J)**

Sir John Soane. sm. 4o. *Lond.* 1925  
PRESENTED BY ERNEST BENN, LTD.

**Blake (E G)**

Roof coverings. 8o. *Lond.* 1925  
PRESENTED BY CHAPMAN & HALL, LTD., THE PUBLISHERS.

**Briggs (M S)**

Short history of the building crafts. 8o. *Oxford* 1925  
PRESENTED BY THE PUBLISHER.

**Davenport (Cyril)**

Architecture in England. 8o. *Lond.* 1924  
PRESENTED BY METHUEN & CO., THE PUBLISHERS.

**Dye (F W)**

Heating and hot water work. 8o. *Lond.* 1924  
PRESENTED BY E. & F. N. SPON, LTD., THE PUBLISHERS.



- Goodwin (P L) and Millikin (H O)**  
 French provincial architecture. fo. *Lond.* 1924  
 PRESENTED BY B. T. BATSFORD, THE PUBLISHER.
- Evershed (W L)**  
 Quantity surveying for builders. 8o. *Lond.* 1923  
 PRESENTED BY CHAPMAN & HALL, THE PUBLISHERS.
- Goodhart-Rendel (H S)**  
 Nicholas Hawksmoor. sm. 4o. *Lond.* 1924  
 PRESENTED BY ERNEST BENN, LTD., THE PUBLISHER.
- Gotch (J A)**  
 Old English houses. 8o. *Lond.* [1925]  
 PRESENTED BY METHUEN & CO., THE PUBLISHERS.
- Gunn (Edwin)**  
 How to heat your house. 8o. *Lond.* 1925  
 PRESENTED BY "COUNTRY LIFE," THE PUBLISHERS.
- Harvey (William)**  
 Modern building practice. 8o. *Lond.* 1925  
 PRESENTED BY THE PUBLISHERS, THE ARCHITECTURAL PRESS.
- Holme (Editor)**  
 Rome past and present, text by William Gaunt. sm. fo. *Lond.* 1926  
 PRESENTED BY "THE STUDIO," LTD.
- Jackson (Sir T G)**  
 Architecture. 8o. *Lond.* 1925  
 PRESENTED BY THE PUBLISHER.
- Kingsford (C L)**  
 The early history of Piccadilly, Leicester Square and Soho. 8o. *Lond.* 1925  
 PRESENTED BY THE CAMBRIDGE UNIVERSITY PRESS.
- Lethaby (W R)**  
 Westminster Abbey re-examined. 8o. *Lond.* 1925.  
 PRESENTED BY THE PUBLISHERS.
- Lindner (Werner) and Steinmetz (Georg) Editors**  
 Die Ingenieurbauten in Ihrer Guten Gestaltung. 4o. *Berlin* 1923  
 PRESENTED BY THE PUBLISHER.
- Livingstone (R W)**  
 The Greek genius and its meaning to us. 8o. *Lond.* 1924
- Lloyd (Nathaniel)**  
 History of English brickwork. fo. *Lond.* 1925  
 PRESENTED BY THE PUBLISHER, H. G. MONTGOMERY.
- Mieras (J P) and Yerbury (F R)**  
 Dutch architecture of the XXth Century. 4o. *Lond.* 1926  
 PRESENTED BY ERNEST BENN, LTD., THE PUBLISHERS.
- Newton (W G)**  
 Prelude to architecture. sm. 8o. *Lond.* 1925  
 PRESENTED BY THE ARCHITECTURAL PRESS.
- Richardson (A E) and Eberlein (H D)**  
 The English inn past and present. 4o. *Lond.* 1925  
 The smaller English house of the later Renaissance, 1660-1830. 4o. *Lond.* 1925  
 PRESENTED BY B. T. BATSFORD, THE PUBLISHERS.
- Royal Institute of British Architects**  
 INTERNATIONAL CONGRESS ON ARCHITECTURAL EDUCATION, 1924.  
 Proceedings. 4o. *Lond.* 1925
- Salwey (Jasper)**  
 Art of drawing in lead pencil, 2nd ed. 8o. *Lond.* 1925  
 PRESENTED BY B. T. BATSFORD, THE PUBLISHER.
- Simon (E D) and Fitzgerald (Marion)**  
 The smokeless city. 8o. *Lond.* 1922  
 PRESENTED BY LONGMANS, GREEN & CO., THE PUBLISHERS.
- Shepherd (J C) and Jellicoe (G A)**  
 Italian gardens of the Renaissance. fo. *Lond.* 1925  
 PRESENTED BY ERNEST BENN, LTD., THE PUBLISHERS.
- Stratton (Arthur)**  
 Elements of form and design in Classic architecture. 1a. 4o. *Lond.* [1925]  
 PRESENTED BY THE AUTHOR [F.].
- Tuthill (W B)**  
 The cathedral church of England. 8o. *New York* 1923  
 PRESENTED BY THE MACMILLAN COMPANY, NEW YORK.
- Yerbury (F R) Editor**  
 Old domestic architecture of Holland. 4o. *Lond.* 1924  
 PRESENTED BY THE ARCHITECTURAL PRESS.

## LOAN LIBRARY PURCHASED.

**Andrews (E S)**

Regulations of the London County Council relating to reinforced concrete and steel framed buildings.  
2nd ed. 80. *Lond.* 1924

**Bell (Edward)**

Prehellenic architecture in the Aegean. 80. *Lond.* 1926

**Blake (E G)**

Enemies of timber: dry rot and the death-watch beetle. 80. *Lond.* 1925

**Briggs (M S)**

Short history of the building crafts. 80. *Oxford* 1925

**Bullock (William)**

Timbers for woodwork. 80. *Lond.* n.d.

**Esquié (Pierre)**

The five orders of architecture (with explanatory notes, etc., by Arthur Stratton). 1a. 40. *Lond.* [1926]

**Firth (J B)**

Highways and byways in Nottinghamshire. 80. *Lond.* 1916

**Gardner (E A)**

Ancient Athens. 80. *Lond.* 1923

**Gotch (J A)**

Old English houses. 80. *Lond.* [1925]

**Hutton (Edward)**

Highways and byways in Wiltshire. 80. *Lond.* 1919

**James (C H) and Yerbury (F R)**

Modern English houses and interiors. 40. *Lond.* 1925

**Kent (W W)**

Life and works of Baldassare Peruzzi. 80. *New York* 1925

**Lanciani (Rodolfo)**

Ruins and excavations of ancient Rome. 80. *Lond.* 1897

**Knobloch (P G)**

Good practice in construction, part 2. 80. *New York* 1925

**Lakeman (Albert)**

Elementary guide to reinforced concrete. 80. *Lond.* 1925

**Lloyd (Nathaniel)**

History of English brickwork. 40. *Lond.* 1925

**Newton (W G)**

The work of Ernest Newton, R.A. 1a. 40. *Lond.* 1925

**Parsons (H F)**

Isolation hospitals. 2nd ed. 80. *Cambridge* 1922

**Pater (Walter)**

Greek Studies. 80. *Lond.* 1925

**Pichel (Irving)**

Modern theatres. 80. *New York* 1925

**Reynolds (Herbert)**

The churches of the City of London. 80. *Lond.* 1925

**Ricci (Cerrado)**

Romanesque architecture in Italy. 40. *Lond.* 1925

**Robertson (Howard)**

Architecture explained. 80. *Lond.* 1926

**Robertson (Manning)**

Laymen and the new architecture. 80. *Lond.* 1925

**Royal Commission on Historical Monuments**

London, Vol. 2, West London. 40. *Lond.* 1925

**Salwey (Jasper)**

Art or drawing in lead pencil, 2nd ed. 80. *Lond.* 1925

**Schmitz (Hermann)**

Encyclopædia of furniture. 1a. 40. *Lond.* 1926

**Scott-Moncrieff (W W)**

John Francis Bentley. 80. *Lond.* 1924

**Stratton (Arthur)**

Elements of form and design in Classic architecture. 1a. 40. *Lond.* 1925

**Watson (F R)**

Acoustics of buildings. 80. *New York & Lond.* 1923

**Wren Society**

Vols. 2 and 3 St. Paul's Cathedral, original Wren drawings from the collection in the library of St. Paul's Cathedral. 40. *Oxford* 1925



# JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

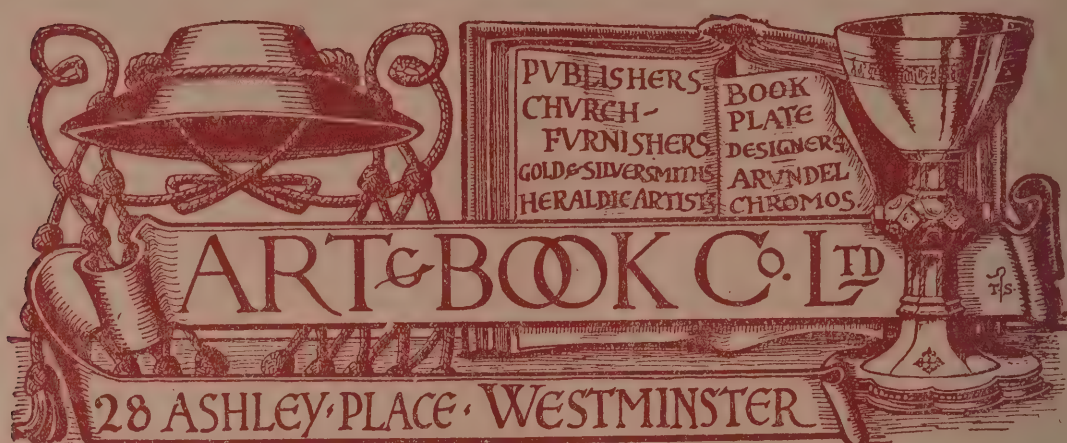


## LEADING CONTENTS

POST-WAR ARCHITECTURE IN GERMANY [DR. HERMANN MUTHESIUS]; OSTIA, THE ANCIENT PORT OF ROME [F. O. LAWRENCE]; THAMES BRIDGES: EVIDENCE BY LORD CRAWFORD [A. R. POWYS], MR. ARTHUR KEEN AND SIR BANISTER FLETCHER; THE LATE SOMERS CLARKE [MERVYN MACARTNEY]; LEGAL; ETC.

PRICE ONE SHILLING AND SIXPENCE

LONDON: N°9 CONDUIT STREET, REGENT STREET, W.



ESTABLISHED 1822.

# Wm. NICHOLSON & SON (LEEDS) Ltd.

## Master Builders.

**Registered Office: Prospect Saw Mills, Sheaf St., LEEDS.**

Telephone: LEEDS 20974.

**London Office:**

**2, WARWICK LANE, LONDON, E.C.4.**

Telephone: CITY 7699.

**Branch Offices:**

**BRADFORD, DEWSBURY, WAKEFIELD.**

**Timber Drying Sheds, Chadwick Street, LEEDS.**

We have carried out Banks in every county in England,  
and make a speciality of High-Class Fittings

Our Stock of Dry Hardwoods and Timber is greater  
than any other Master Builder in Great Britain

**WE HOLD A UNIQUE STOCK OF FIGURED WALNUT.**

Leeds Telegraphic Address: "CHOLSO, LEEDS." London Telegraphic Address: 'CHOLSO, CENT, LONDON.'

## THE IDEAL FLAT OIL FINISH FOR WALLS

**EASY TO APPLY**

**FREE FLOWING**

**DOES NOT SHOW  
BRUSH MARKS  
NOR REQUIRE  
STIPPLING.**



**UNIQUE COVERING  
AND OBLITERATING  
POWER.**

**WASHABLE  
AND  
DURABLE.**

**WHITE and 30 TINTS  
and COLOURS.**

MANUFACTURED BY

**A. SANDERSON & Co. Ltd., Kingston Colour & Varnish Works, HULL.**



# THE ARCHITECTURAL JOURNAL

BEING THE JOURNAL OF  
THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

## WHITFIELDS SAFE & DOOR Co.

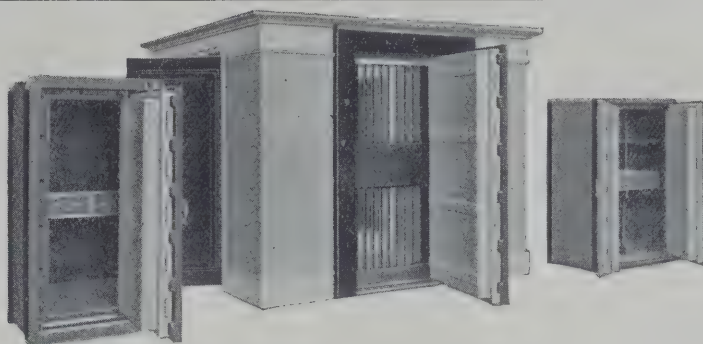
ESTABLISHED 1845.

OXFORD STREET  
BIRMINGHAM

Telephone: Central 641

2, NOTTINGHAM STREET  
MARYLEBONE, LONDON W.1.

Telephone: Mayfair 1123



OUR EXPERIENCE AND SERVICE AT YOUR DISPOSAL.

## CAVITY WALLS SUPERSEDED

BY THE USE OF

## CALLENDER'S "BITUBOND" BUILDING COMPOSITION

BONDS WALLS WITHOUT TIES.

ENORMOUS CRUSHING AND TENSILE STRENGTH

SETS LIKE ROCK.

ABSOLUTELY IMPERVIOUS TO MOISTURE.

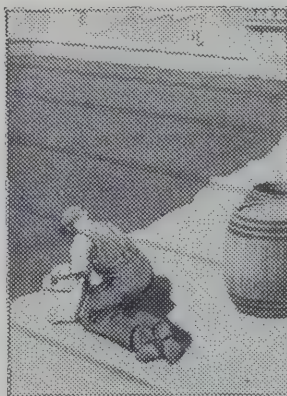
Send for Booklet No. 49 to:—

**GEORGE M. CALLENDER & CO. LTD.**  
25, VICTORIA STREET, LONDON.

Telegrams: "Quarriable, London."

## INFORMATION CORNER

### FLAT ROOFS (3)



When specifying "Rufoid" insulation on old lead include burning off with blow lamp or thorough cleaning with strong wire brush. An eighth-inch rendering with "Rufoid" laid by any competent plasterer will give an impervious surface of similar appearance to the original lead.

**The BUILDING TRADES PRACTICAL  
LABORATORY**

The Graphite Oils Company, Limited, Grimsby,  
Lincolnshire

We have just completed the Contract for nearly 200 COMPOSITE WINDOWS for the New Central Schools, Staveley Road, Chiswick, for Chiswick U.D.C.

Telephone:  
46 WEST BROMWICH Pte. B. Exch.

Telegrams:  
"CASEMENTS, WEST BROMWICH."

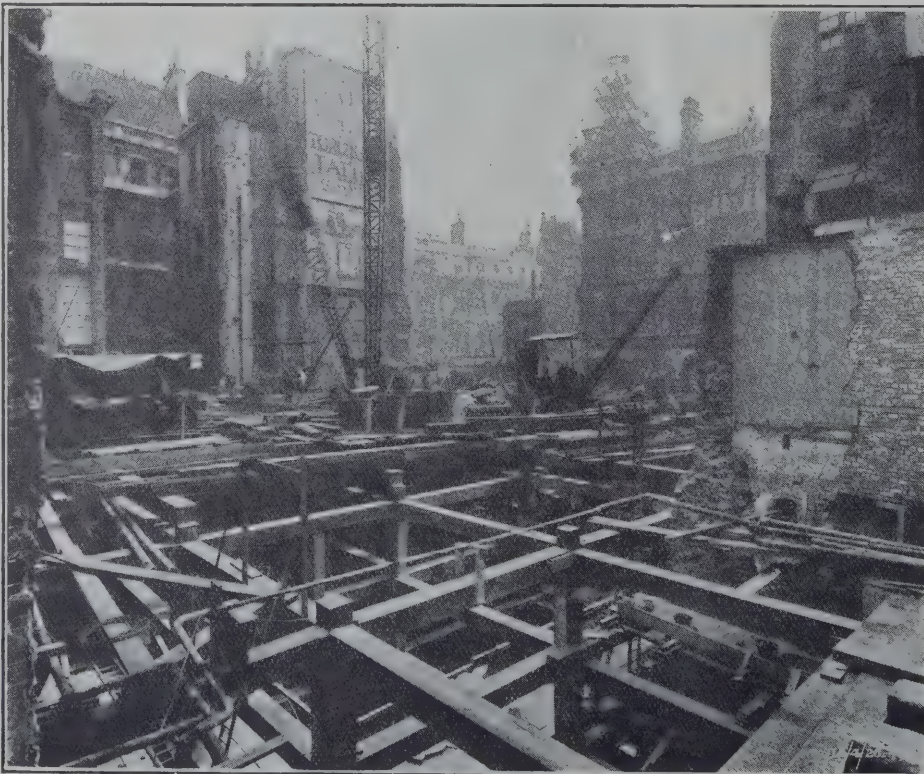
*The West Bromwich Casement*  
AND ENGINEERING CO. LTD  
94, George Street. WEST BROMWICH.

LONDON OFFICE: Mr. H. G. Blakemore, 180, Piccadilly, W.1. 'Phone: Gerrard 8263.



## INDEX TO ADVERTISEMENTS.

PAGE	PAGE	PAGE	PAGE
Abergynolwyn Slate and Slab Co., Ltd. (The) .. xxxv	Dawnay & Sons, Ltd., Archibald D. .. xxiv	Lion Foundry Co. Ltd. .. xx	Seward & Co., J. B. .. xlix
Anderson, Gibb & Wilson .. xxxiii	Dent & Hellyer, Ltd. .. xv	London Brick Co. & Forders, Ltd. .. xxi	Shanks & Co., Ltd. .. xii
Anderson & Son, Ltd., D. .. xlvii	Earle, Ltd., G. & T. .. 1	Macfarlane & Co., Walter .. —	Shaw & Co., Ltd., Matt. T. .. xxix
Architectural Press .. xxxvii	Edwards, J. C. .. —	Major, H. J. & Co., Ltd. .. 1	Shaw & Sons, Ltd. .. xv
Art & Book Co., Ltd. .. ii	Everitt & Sons, G. E., Ltd. .. xlix	Martyn & Co. Ltd., H. H. .. xxv	Shurmer & Sons, Ltd., Wm. .. xlviii
Art Metal Construction Co. .. x	Expanded Metal Co., Ltd. (The) .. xxxiv	McArd & Co., Ltd., R. .. xlix	Siemens Bros. & Co., Ltd. .. xlv
Arts Pavement & Decorations, Ltd. .. xxxix	Faldo & Co., Ltd., Thos. .. xxxviii	McNeill & Co. Ltd., F. .. xxix	Silicate Paint Co. (The) .. xxvi
Ashton & Holmes, Ltd. .. xl	Fenning & Co., Ltd. .. xl	Mealing Bros. .. xlix	Sissons Brothers & Co. Ltd. .. xlv
Barnes, Ltd., F. J. .. xxxiv	French Asphalte Co., Ltd. (The) .. xlii	Medway's Safety Lift Co., Ltd. .. xlv	Smith, James & Sons (Gold Beaters), Ltd. .. xli
Bath & Portland Stone Firms, Ltd. (The) .. xxxviii	Gibbons, Ltd., James .. xv	Merchant Trading Co., Ltd. .. xviii	Smith, Major & Stevens, Ltd. .. xxxvii
Batsford, B. T., Ltd. .. xxxviii	Grano-Metallic Paving Co., Ltd. .. xl	Messenger & Co., Ltd. .. xli	Smith & Rodger, Ltd. .. xxxvi
Bayliss, Jones & Bayliss, Ltd. .. xl	Graphite Oils Co., Ltd. (The) .. iii	Metropolitan-Vickers Electrical Co. Ltd. .. xxxiii	Smith & Son, Thomas .. xiv
Beeston Boiler Co., Ltd. (The) .. —	Grover & Co., Ltd. .. xlii	Mills & Sons .. —	Somerford & Son, H. .. xlviii
Benham & Sons, Ltd. .. li	Gypsum Mines, Ltd. (The) .. lix	Minimax, Ltd. .. xxxv	Sperryn & Co. .. xlv
Berry & Sons, Z. D. .. xxxii	Hall, Beddall & Co., Ltd. .. xlix	Miskin & Sons, Ltd., C. .. xlviii	Standard Cork Insulation Co. Ltd. .. xviii
Berger, Lewis & Sons, Ltd. .. xxxvi	Harland & Son, W. .. viii	Mullen & Lumsden, Ltd. .. lii	Standard Range and Foundry Co., Ltd. .. xlv
Blake, Ltd., J. .. xx	Harrison & Co., G. W. .. lvii	Naylor Bros. (London), Ltd. .. xxxvi	Stanley & Co., Ltd., W. F. .. xxxvi
Boyle & Son, Robert .. —	Hathern Station Brick & Terra-Cotta Co., Ltd. (The) .. xlvii	Newman & Sons, Ltd., William .. xlix	Stuart's Granolithic Co., Ltd. .. —
Bradley & Son, Charles .. xl	Haywards, Ltd. .. xlv	Nicholson & Son, Ltd., Wm. .. ii	Tamplin & Makovski, Ltd. .. xxxv
Bratt, Colbran & Co., Ltd. .. ix	Heathman, J. H. .. xlv	Nobles & Hoare, Ltd. .. xxx	Tann, John .. xxi
Briggs & Sons, Ltd., William .. —	Hemel Hempstead Patent Brick Co. Ltd. (The) .. xlviii	Northern Assurance Co., Ltd. .. xlv	Tanner, H. C. .. xliii
British Commercial Gas Association (The) .. —	Henderson Ltd., P. C. .. lviii	O'Brien, Thomas & Co. .. li	Tarmac, Ltd. .. —
British Fibrocement Works, Ltd. .. xxxiv	Hill & Smith, Ltd. .. xxxviii	Ogilvie & Co. .. xlviii	Tavener & Son, C. .. xlix
British Luxfer Prism Syndicate, Ltd. (The) .. xl	Hobbs, Hart & Co., Ltd. .. lix	Palmer & Co. Ltd., W. H. .. xlv	Thames Board Mills .. xxi
British Reinforced Concrete Engineering Co., Ltd. .. xlii	Holloway Bros. (London), Ltd. .. lvi	Pantin, W. & C. .. xli	Thermal Syndicate, Ltd. .. xl
Bruster, O. & Richardson .. xxxvii	Holt, W. F. S. .. —	Patent Impermeable Millboard Co., Ltd. .. xlii	Thornborough, Arthur, Ltd. .. xli
Bullers, Ltd. .. —	Howse, Ltd., Thomas .. xlv	Patent Victoria Stone Co., Ltd. .. —	Thornton, A. G., Ltd. .. xlii
Burn Brothers (London), Ltd. .. xxvi	Huntley & Sparks .. xlvii	Patman & Fotheringham, Ltd. .. xlix	Tiranti & Co., John .. xlii
Candy & Co. .. xv	Improved Wood Pavement Co. Ltd. (The) .. xlv	Penmaenmawr & Trinidad Lake Asphalt Co. Ltd. (The) .. xxxvii	Trussed Concrete Steel Co. Ltd. .. lv
Cable Makers' Association (The) .. vii	Interoven Stove Co. Ltd. (The) .. lvi	Pilkington Bros. Ltd. .. xxii	Tucker & Son, Ltd., G. .. xlviii
Cafferata & Co., Ltd. .. xliii	Isler & Co., Ltd., C. .. vi	Pilkington's Tile & Pottery Co. Ltd. .. xliii	Tuke & Bell, Ltd. .. xix
Callender & Co., Ltd., G. M. .. iii	Jones & Seward, Ltd. .. xlix	Pitman & Sons, Ltd., Sir Isaac .. liii	Turner Bros. Asbestos Co., Ltd. .. xxx
Carter, Ltd., G. H. .. xxxviii	Kerner-Greenwood & Co., Ltd. .. xxxi	Plywood Development Association (The) .. xvi	Turner, F. .. xlv
Cash & Co., Ltd., H. J. .. xlii	King, Ltd., Geo. W. .. xxvii	Ratcliffe, J. H. .. lvi	Val de Travers Asphalte Paving Co., Ltd. .. xlii
Castles' Shipbreaking Co., Ltd. .. xlii	Kianell & Co., Ltd., C. P. .. xxviii	Rice & Son .. iv	Valls, A. .. xl
Cement Marketing Co., Ltd. (The) .. xvii	Kleine Patent Fire Resisting Flooring Syndicate, Ltd. (The) .. lviii	Rippers, Ltd. .. xlviii	Valveless Syphon Co. .. lix
Chatwood Safe Co., Ltd. (The) .. v	Laing & Son, Ltd., John .. lx	Rosser & Russell, Ltd. .. xxxii	Vigers, Sons & Co., Ltd. .. —
Clipsham Quarry Company .. —	Lawrence & Sons, Thos. .. xli	Royles, Ltd. .. xxxi	Vulcanite, Ltd. .. xxxiii
Cochran & Co. (Annan), Ltd. .. xxiv	Lees, Alex. .. xlii	Russell & Sons, Ltd., R. .. xxii	Walker & Son, Ltd., Henry .. xxxviii
Cookson Lead & Antimony Co., Ltd. (The) .. xxxiii	Limmer & Trinidad Lake Asphalt Co. Ltd. (The) .. xxxiii	Ruston & Hornby, Ltd. .. xxxix	Wallis & Sons, Ltd., G. E. .. xlix
Comyn Ching & Co., Ltd. .. xix	Laing & Son, Ltd., John .. lx	Safety Tread Syndicate, Ltd. .. xxxiii	Waygood-Otis, Ltd. .. xxxiv
Croft Granite, Brick & Concrete Co., Ltd. .. xxxvii	Lees, Alex. .. xlii	Sanderson & Co., Ltd., A. .. ii	West Bromwich Casement and Engineering Co., Ltd. (The) .. iii
Courtrai-du-Nord Tile Co., Ltd. (The) .. xi	Limmer & Trinidad Lake Asphalt Co. Ltd. (The) .. xxxiii	Sanderson & Sons, Ltd., A. .. xxxix	West London Timber & Moulding Co., Ltd. .. lix
Cullum & Co., Ltd., Horace W. .. xxv		Sankey & Sons, Ltd., J. H. .. xxxix	Whitfields Safe & Door Co. .. iii
		Scottish Widows Fund & Life Insurance Society .. xlvii	Williams & Williams, Ltd. .. lii
			Woco Door Co. .. xlv
			Wood, Russell & Co. Ltd. .. xxxv
			Wright, George (London), Ltd. .. xxxvii



WORK ON SITE OF  
THE NEW HEAD OFFICE OF THE MIDLAND BANK LIMITED

ARCHITECTS  
MESSRS. GOTCH & SAUNDERS  
F.F.R.I.B.A.  
with  
SIR EDWIN LUTYENS, R.A.

BUILDERS  
MESSRS. RICE & SON, LONDON



*"Achievement is but another milestone along the highway of progress—the end of the journey lies ever beyond."*

THE CHATWOOD TRADITION



## The Undying Truth

The fundamental laws that govern human conduct remain the same in all ages and in every environment.

The truths that Confucius taught his eager pupils of years ago have not lost their verity, although the whole structure of civilisation seems transformed by scientific discovery and mechanical invention.

Behind the machine still stands human thought and human craftsmanship, dealing with new problems by the old rules. It remains as true as ever it was that it is not the tools that make for great achievement, but those who wield them.

If a business is to grow it must have in its constitution something more than mere commercialism. There must be the joy of creation and happiness in passing the milestones of progress.

Growth is life, and without growth a business, like a tree, declines and dies.

The Chatwood policy of "Craftsmanship before immediate material profit" has never been allowed to be overshadowed by any other consideration.

Craftsmanship never fails ultimately to win recognition and fame. It is the one thing of all others most respected, for it stands for a multitude of solid virtues.

It is on good craftsmanship that the name of The Chatwood Security has been built and is to-day securely based.

J. E. S.

# THE CHATWOOD SECURITY

We have carried out security contracts for the leading Bankers throughout the world, with a result that this wide experience has given us most useful data and memoranda, which are always at the disposal of the Architect, with whom we are always pleased to consult without obligation of any sort.

### THE CHATWOOD SAFE CO. LTD.

*Bankers' Engineers*

Head Office and Works: BOLTON, England

#### Branches:

LONDON: 3, Laurence Pountney Hill, E.C.4. Phone: City 9471

MANCHESTER: Royal Exchange. Phone: City 3018

GLASGOW: 30, Monteith Row. Phone: Bridgeton 653

# WATER SUPPLIES

## ARTESIAN BORED TUBED WELLS

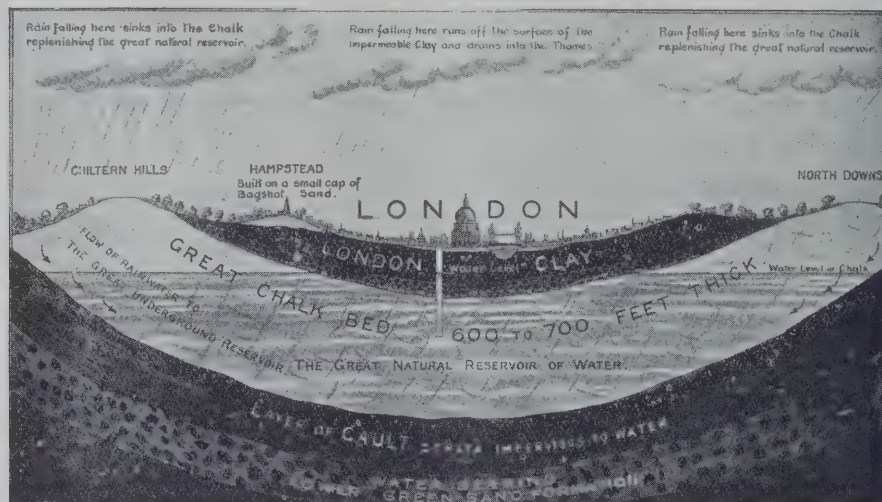
C. ISLER'S IMPROVED SYSTEM of raising LARGE or SMALL quantities of WATER from any depth by IMPROVED AIR LIFT PUMPS, TURBINE and DEEP WELL PUMPS or any other kind of PUMP worked by any power.

*List of some prominent buildings in London with C. Isler & Co.'s Water Supply Installations.*

Angel Court, Throgmorton Street  
Baltic Exchange, St. Mary Axe  
Bank of England (2 installations)  
Bank of Montreal, Threadneedle Street  
Bishopsgate House, Bishopsgate  
British Bank of South America, Moorgate  
Broad Street House  
Cannon Street House (2 installations)  
City Offices Co., 39, Lombard Street  
Cory & Sons, Ltd., Fenchurch Street  
Dashwood House, New Broad Street  
East India Chambers  
18, Finsbury Circus (2 installations)

Great St. Helen's Estates (3 installations)  
Gresham House, Old Broad Street  
Guardian Assurance, King William Street  
Harrisons & Crosfield, Ltd., Great Tower Street  
Holland House, Bury Street, St. Mary Axe  
Leadenhall House (2 sets)  
Leathersellers' Hall, St. Helen's Court (2 sets)  
Law Union & Rock Insurance Co. (2 sets)  
Lloyds Bank, Ltd., King William Street  
London Assurance Building, King William Street  
London Joint Stock Bank, Princes Street  
Northern Assurance Co. Ltd., Moorgate Street (2 sets)

Ocean House, Lower Thames Street  
Old Change, Cheapside (2 installations)  
Provident Mutual Assurance Co. Ltd., Moorgate Street  
Rylands & Sons, Ltd., Wood Street  
Salters' Hall, Cannon Street  
Scottish Provident Institution Buildings, King William Street (2 sets)  
Shorters Court, Throgmorton Street  
Threadneedle House  
Union of London & Smiths Bank, Princes Street  
Warnford Court, Throgmorton Street  
Winchester House, Old Broad Street



GEOLOGICAL FORMATION UNDER LONDON.

As our experience extends over the whole of the United Kingdom we are in a position to offer sound advice as regards obtaining **WATER SUPPLIES** or improving existing ones.

We might state that we are the pioneers of the Air Lift system of pumping in Great Britain and have made numerous improvements in Deep Well Pumping Machinery, etc.

Complete Water Supplies for Banks, Insurance Offices, Warehouses, Breweries, Factories, Mansions, Estates, Farms, Waterworks, Gas Works, Electricity Works, Public Institutes.

Sites Inspected. Geological opinions furnished.

Estimates given. Steam, Oil and Gas Plants.

## C. ISLER & CO. LTD.

Artesian Works: **BEAR LANE, SOUTHWARK STREET, LONDON, S.E.1**  
Telegrams: "ISLER, LONDON." Telephone: HOP 4460 (3 Lines)

Contractors to H.M. War Office, Admiralty, India Office, Ministry of Health, Crown Agents for the Colonies, etc.

**BIRMINGHAM BRANCH: ARTESIAN WORKS, 58, SUMMER ROW, BIRMINGHAM.**

**LEEDS BRANCH: 210, WELLINGTON STREET, LEEDS. And at LIVERPOOL.**



# A NEW LINE IN CABLES

Architects, Wiring Contractors and others are advised that

## C.T.S.

Cables (Patent 3996/11) are now available in  
Non-Association

Reg. Trade Mark  
No. 458865

## "NONAZO"

class in sizes for internal house wiring

Enquiries should be addressed to

Regd. Trade Mark  
422219-20-21

## C.M.A.

members whose names are set out below



Copyright  
L. B. Atkinson  
Exclusive Licensees,  
Members of the C.M.A.

### Members of the Cable Makers' Association

The Anchor Cable Co. Ltd.	The Greengate and Irwell Rubber Co. Ltd.	The Macintosh Cable Co. Ltd.
British Insulated Cables, Ltd.	W.T. Henley's Telegraph Works Co. Ltd.	Pirelli - General Cable Works, Ltd.
Callender's Cable and Construction Co. Ltd.	The India Rubber, Gutta-Percha and Telegraph Works Co. Ltd.	St. Helens Cable and Rubber Co. Ltd.
The Craigpark Electric Cable Co. Ltd.	Johnson & Phillips, Ltd.	Siemens Brothers & Co. Ltd.
The Enfield Cable Works, Ltd.	Liverpool Electric Cable Co. Ltd.	Standard Telephones & Cables, Ltd.
W. T. Glover & Co. Ltd.	The London Electric Wire Co. and Smiths, Ltd.	Union Cable Co. Ltd.

Advt. of The Cable Makers' Association, Sardinia House, Sardinia Street, W.C.2



By Appointment to  
H.M. the King.

# HARLAND'S

## VARNISHES

White Marble  
Front Door Copal  
Ex. Hd. Church Seat, etc.

## ENAMELS

Snowite and Ivorite,  
Flat Enamels and  
Glossite, all Shades.

## SPECIALITIES

SCUMBLE STAINS  
IMPERISHABLE PAINT  
FLAT OIL FINISH  
"HARLANIA"  
LEADLESS WHITE  
FILLING-UP COMPOSITION

Finely Ground Colours for Decorators' use.

## WM. HARLAND & SON

MERTON, LONDON, S.W.19.

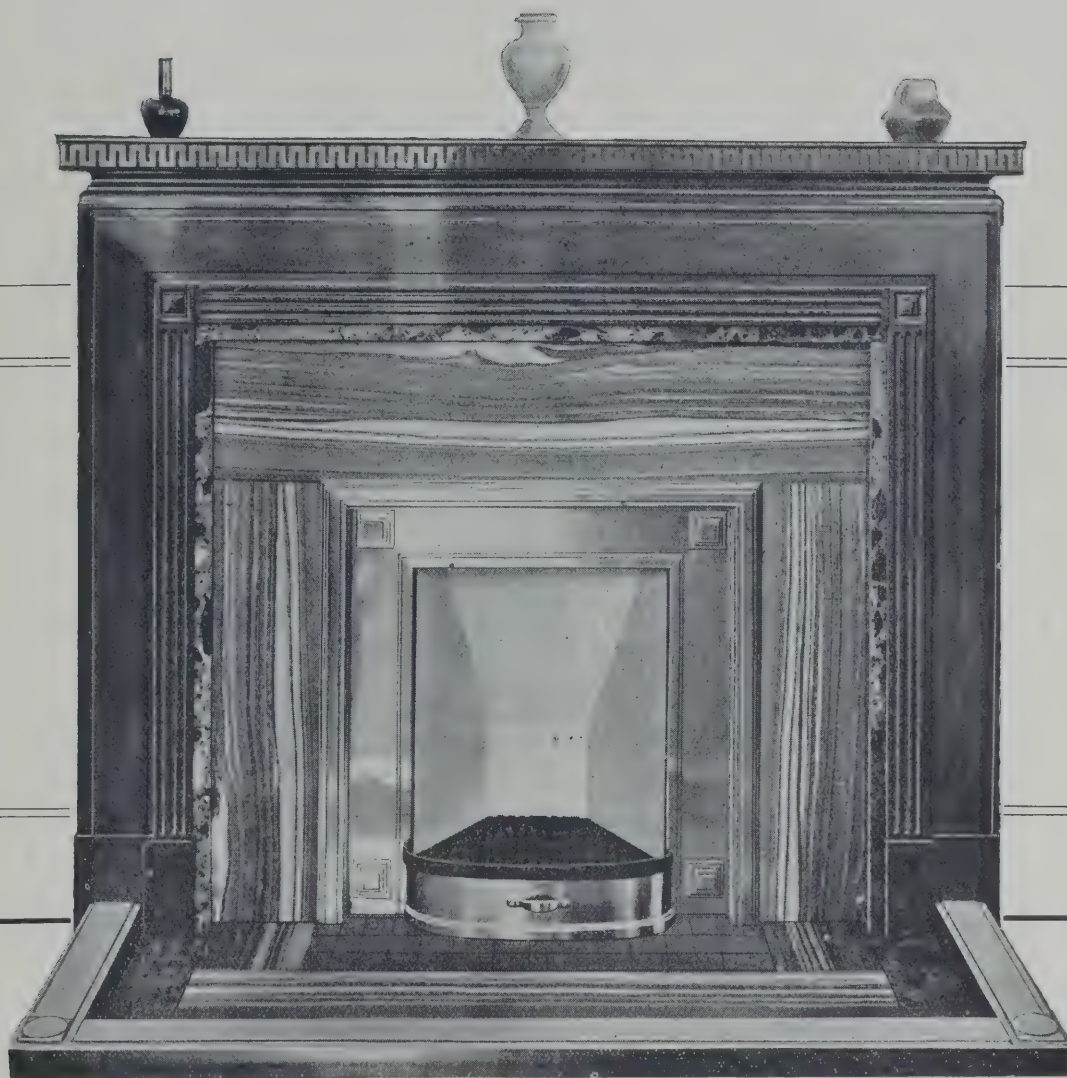
(ESTABLISHED 1791)

Telegrams: "HARLAND, MITCHAM, 2994"

Telephone: MITCHAM 2994 (3 lines).



# *The "Heaped" Fire*



The "Heaped" Fire is dominant amongst the better fireplaces.

*Illustrated Catalogue on request.*

BRATT COLBRAN & CO

*and the Heaped Fire Company L<sup>td</sup>*

*10, Mortimer St London W.*

*Telephone Museum 6701 & 6702    Telegrams "Proteus Wesdo London."*



**Art Metal —**

## *The Modern Office Furniture*

To-day—with business demanding every possible time and labour-saving aid, and with heavy rents demanding the utilization of every foot of floor space—ART METAL Steel Office Furniture plays a more important part than ever before.

So thoroughly complete is the ART METAL line—embracing over 300 different articles, from desk trays to safes—that every office need is anticipated.

ART METAL is fire-resisting, damp and vermin-proof, easy to keep clean, practically everlasting, and low in first cost. A 4-drawer Filing Cabinet only costs £8, and there are 70 different types of desks ranging from £14 upwards—all in STEEL!

Send for this  
New Complete  
CATALOG



It pictures and describes  
in detail the complete  
ART METAL Line.

WRITE FOR SPLENDID NEW CATALOGUE, 765-A

# Art Metal

CONSTRUCTION COMPANY

OFFICES & FACTORY: 199-203 Buckingham Palace Road, S.W.1

SHOWROOMS:

31 Kingsway, London, W.C.2

TELEPHONE:

Sloane 5201





AN example of  
Marseilles Tiles  
showing their  
utility and picturesque  
appearance when used in  
Domestic Architecture.

LANGLEY LONDON  
LIMITED

One hundred & sixty-one  
Borough High Street,  
LONDON

South East One

NEILL



MARSEILLES  
ROOFING ~ TILES



# *The* "APTUS" BATH



THE "APTUS" Bath is a new type of bath enclosed externally with panels which may be in tiles, marble, or other materials to correspond with walls.

It is made to build into the wall to form a feature of the bathroom, and makes possible that harmony in design so essential to a beautiful whole.



"APTUS" Bath List No. 412 shows many applications of this bath to fit into right or left hand corner or between walls and will be sent on request.

## SHANKS & CO. LTD.

HEAD OFFICE: TUBAL WORKS, BARRHEAD, SCOTLAND

ALSO AT

LONDON • MANCHESTER • NEWCASTLE-ON-TYNE • GLASGOW  
BRISTOL • LIVERPOOL • DUBLIN



## R E I N F O R C E D   C O N C R E T E



Extensions to Tilbury Hospital.

For The Seamen's Hospital Society.

*Architect: Stanley Hamp, Esq., F.R.I.B.A. (Messrs. Collart & Hamp).*

Raft Foundation reinforced with B.R.C. Fabric.

The ease with which B.R.C. Fabric is handled either in rolls or in sheets produces greatest accuracy of construction and at the same time saves to the contractor several pence per square yard.

The BRITISH REINFORCED  
CONCRETE ENGINEERING  
CO. LTD.

*Head Office & Works: STAFFORD.*

*Branch Offices: LONDON (Kings Bldgs., Smith Sq., Westminster), LEEDS,  
MANCHESTER, BRISTOL, LEICESTER, GLASGOW, DUBLIN and BELFAST*





**WHEN** you want to be sure of a particularly good finish we suggest that you specify one of the following speciality lines :

**"POLACCO"**

Genuine White Lead Paint

**"CALESCO"**

Washable Distemper

**"O. M. V."**

Old Matured Varnish

These and many other varieties of paint, varnish and enamel are available for immediate delivery in any quantity.

**"POLACCOLINE"**

Enamel and Hard Undercoating

**"E. P. C."**

Extra Pale Copal Varnish

**"CEILPOLA"**

Whitewash

All our lines are backed by our hundred-year reputation for high quality products.

*May we give you a quotation ?*

Telephones

AVENUE

4411, 0418, 0419

**Thomas Smith & Son**

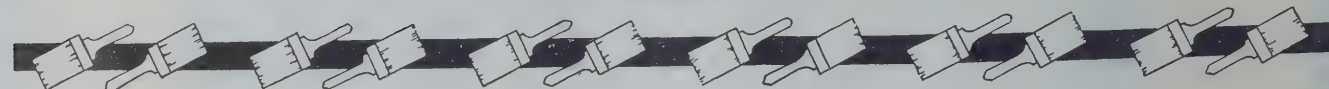
238-240, WHITECHAPEL RD. LONDON, E. 1



Established

over 100

years



## HAYWARDS Collapsible Gates

THE illustration shows a typical Haywards Steel Collapsible Gate for a Lift Entrance, one of numerous recent constructions. Haywards Ltd. manufacture Collapsible Gates of all types and sizes. They have been particularly successful in their experience with large gates and are responsible for the design of many of the most striking examples. Estimates gladly given on request.

Haywards Ltd. are the well-known manufacturers of numerous Building Specialities, the chief of which are named below. Architects are invited to write for details.

**HAYWARDS · LTD.**  
UNION ST. BOROUGH LONDON, S.E. 1.

PAVEMENT LIGHTS  
IRON STAIRCASES  
HEATING & VENTILATING  
STEEL CASEMENTS & SASHES  
COLLAPSIBLE GATES ETC.



'PUTTYLESS' ROOF GLAZING  
SHOWLIGHTS & LAMPFRONS  
LEADLIGHTS & COPPER LITES  
'JHILMIL' STEEL CASES  
ARCHITECTURAL METALWORK ETC.

Telephone: MOP 3042 (4 Lines)

Cablegrams: Haywards Sons, London





# SHAW & SONS

LIMITED

## ARCHITECTS' PRINTERS AND STATIONERS

Bills of Quantities, Sale  
Particulars, Specifications

## ESTATE PLANS

and Every Class of Litho-  
graphic and Letterpress Printing.  
Large stocks of Drawing, Trac-  
ing, Sectional and Ruled Papers.  
All kinds of General Office  
Stationery.

*Revised Catalogue of Architects' Requirements post  
free on receipt of business card or letter heading.*

## SHAW & SONS

LIMITED

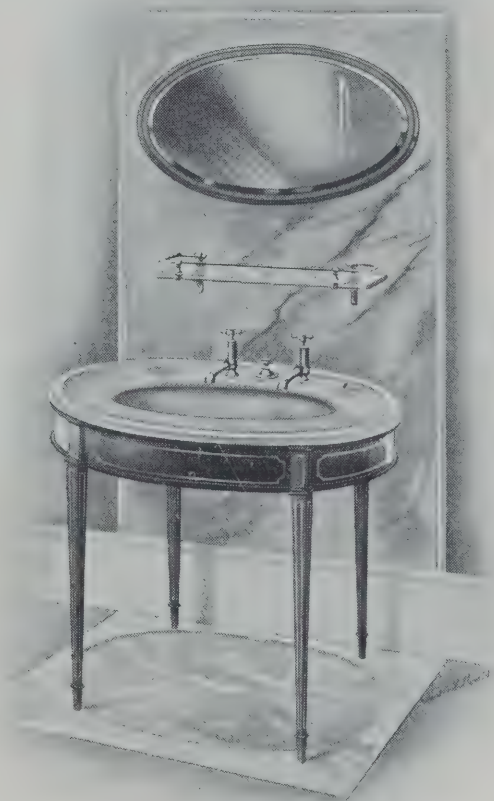
7, 8 & 9 FETTER LANE, LONDON, E.C.4

# DENT & HELLYER, LD.

*Sanitary Engineers*

Established 1730.

MANUFACTURERS OF MODERN  
SANITARY APPLIANCES.



EXPERT INSTALLATION TO  
ARCHITECTURAL REQUIREMENTS.

Show Rooms:

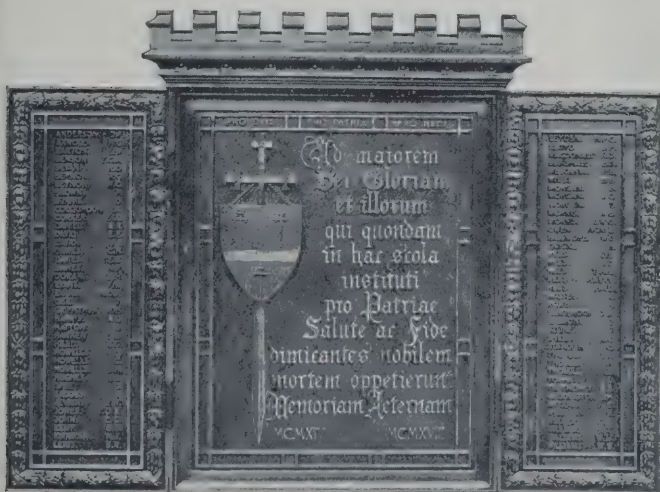
**35, Red Lion Square, Holborn,  
London, W.C.1.**

Telephone:  
Holborn 6416.

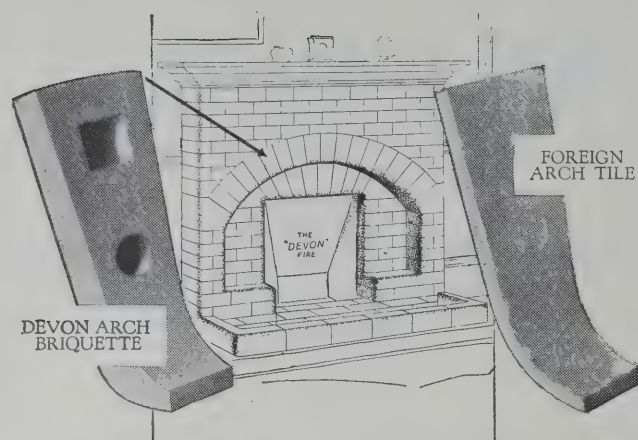
Telegrams:  
"Anosmia" Holb., London.

# JAMES GIBBONS LTD.

WOLVERHAMPTON & LONDON



ART METALWORK • STEEL WINDOWS  
LOCKS AND GENERAL IRONMONGERY  
SAFES • LOCKERS • STEEL SHELVING ETC



## Use Arch Briquettes not angle tiles

THESE two pictures give a graphic answer to the question "How is it that Devon tiles never work loose or crack?"

Notice how the Devon briquette is thicker, stronger, heavier—sturdier in every way than its foreign equivalent. Notice the deep frogs in the Devon briquette—these allow the backing cement to grip with a tenacity quite impossible with thin, light tiles.

People who buy Devon Fires choose them mainly on account of their beauty and colour. But it is for the architect to point out to his client those hidden qualities of construction which have served, no less than artistic design, in placing the Devon Fire in a supreme position in the British Fire market.



This free booklet tells the complete story of the Devon Fire in manufacture and in use. Every architect should keep it by him for inspiration.

Write for it.

**THE DEVON FIRE**  
CANDY & CO. LTD. 87 NEWMAN STREET  
LONDON W.1



## RIGIDITY

Plywood is firmer and has more solidarity than any other form of wall or ceiling covering. It is infinitely superior to plaster, and where it is used ceiling joists can frequently be placed wider apart. This rigidity is permanent too, there is no warping, softening or crumbling to be faced. Plywood gives a better finished, better looking and more permanent job.

### Actual Rigidity Tests

Rigidity tests were carried out on strips of composition wallboard and of plywood 10" long and 1" wide. Each strip was supported at the ends and weights were placed on the middle. The weight given below is the weight needed to bend each piece one inch downwards.

Composition wallboard	3½ lbs.
Plywood	- - - 27 lbs.

*Use plywood  
—it pays.*



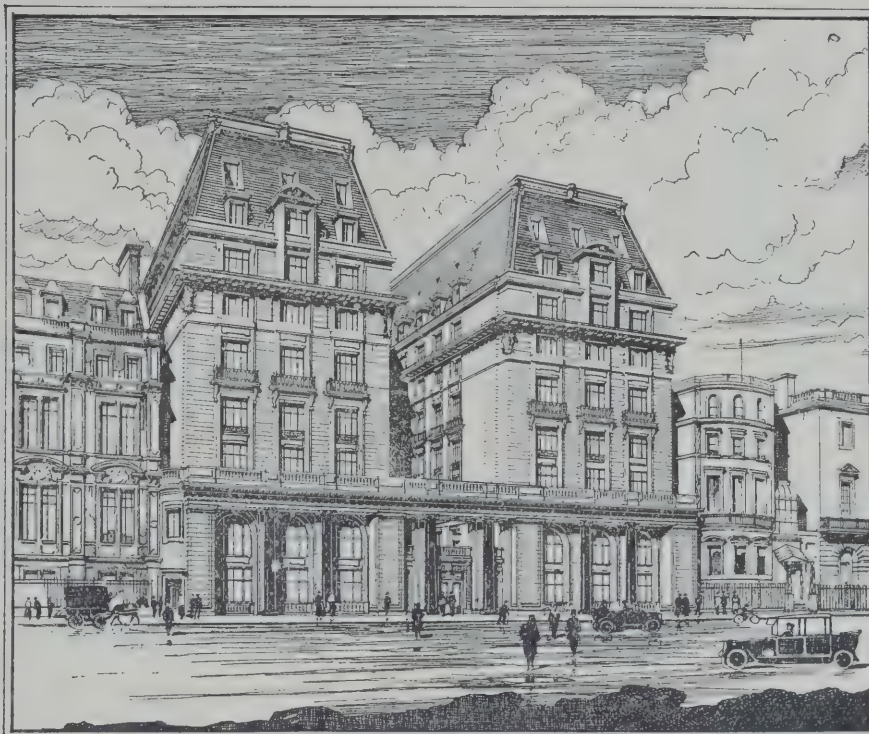
81, City Road, London, E.C.1.

From whom any information on Plywood can be obtained  
Write for Leaflet I and a list of suppliers



# BLUE CIRCLE CEMENT

*helps to build Great New London Hotel*



Architects :—Messrs. Henry Tanner.

Contractors :—Higgs & Hill Ltd.

That gaunt steel skeleton of a building which has stood in Piccadilly for so many years in a half finished state is to be completed at last.

Park Lane Hotel (as it is to be) is once more in the hands of the builders and when completed will rank among the largest and best equipped hotels in London.

What strides have been made in the use of concrete since this work [was started before the war! Concrete will play an important part in the building of Park Lane Hotel and the cement used will be Blue Circle.

Architects and Contractors everywhere are specifying and using Blue Circle Cement to an ever increasing extent because of its splendid quality and absolute reliability.



THE CEMENT MARKETING COMPANY LIMITED

*Selling Organisation of*

The Associated Portland Cement Manufacturers Limited. The British Portland Cement Manufacturers Limited.

PORTLAND HOUSE, TOTHILL STREET, WESTMINSTER, S.W.1



# CORK as a Building Material

Cork is Nature's finest heat/cold insulator and sound-deadening material. In the form of ELDORADO COMPRESSED CORK SLAB, Architects and Builders have a thoroughly dependable material for a variety of uses. As an interior lining, the use of Cork means comfort and economy of fuel—warmth in winter—coolness in summer. For purposes of sound-deadening it is unsurpassed. It is damp-proof—rot-proof—and vermin-proof. ELDORADO COMPRESSED CORK SLABS are of handy size, 36in. × 12in. in thicknesses of 1 in., 1½ in., 2 in., 3 in., and 4 in.—can be nailed like timber, and finished with cement or plaster without special preparation. A sample and further particulars will be supplied on request.

London Office—14, WEST SMITHFIELD, E.C. 1.

Telephone: City 9977.

'Grams: Standacork, London.

**Eldorado**  
Compressed Cork Slab  
**STANDARD CORK**  
COMPANY, LIMITED,  
LONDON. LIVERPOOL. GLASGOW.

# Slammed!

Slammed, banged to; thrown open suddenly; opened and shut a hundred times a day; perhaps an exterior door with wind and rain or hot sun beating on it.

A door's got a lot to put up with! But **Metco** doors stand the strain. Their frames of 100% "quartered" sawn lumber, Columbian Pine, guaranteed free from knots and objectionable raised grain, see to that. Their natural grain appearance and dignified design make them doors of distinction and quality.

Apply to your District Timber or Builders' Merchant, or write direct for Illustrated Catalogue, giving sizes and patterns.

# METCO

The **DOORS** of Quality  
COLUMBIAN PINE

The **MERCHANT TRADING COMPANY Ltd**

34, Bishopsgate, LONDON, E.C.2

Warehouses: { 101, Grosvenor Road, London, S.W.1  
194/6, Rimrose Road, Bootle, Liverpool.

Pattern No. 66



# COMYN, CHING & CO., LTD.

22, 23, 24, LITTLE SAINT ANDREW STREET,  
LONDON, W.C.2.

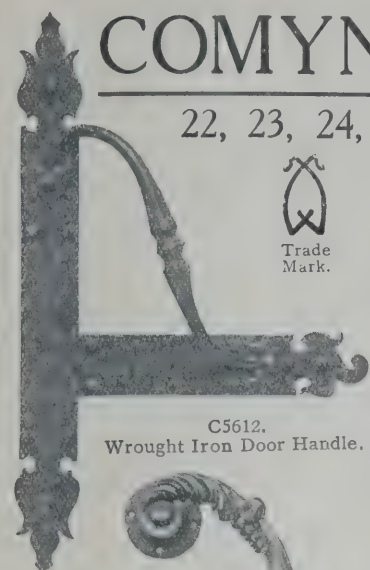


Trade  
Mark.

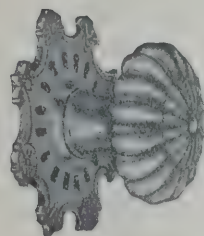
Dublin Office & Showrooms: 17, SOUTH FREDERICK STREET.

We have SPECIALISED for 200 years  
IN ALL KINDS OF **BUILDERS'**  
**HARDWARE**

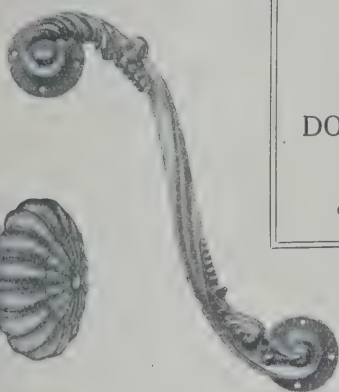
LOCKS, DOOR SPRINGS, HINGES,  
DOOR FURNITURE, CASEMENT FITTINGS,  
FANLIGHT GEARING, &c., &c.  
and METAL WORK of EVERY DESCRIPTION



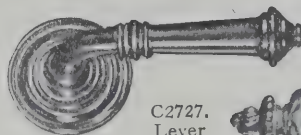
C5612.  
Wrought Iron Door Handle.



C5818.  
Brass Door Handle.

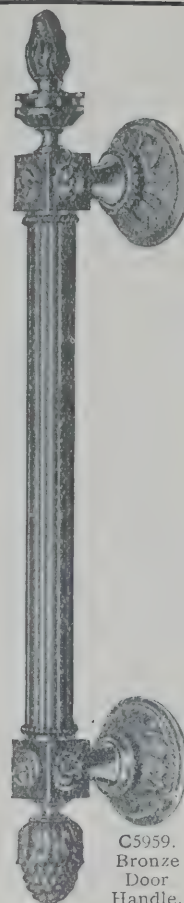


C5622. Bronze  
Door Handle.



C2727.  
Lever  
Handle.

C2747.  
Lever Handle.



C5959.  
Bronze  
Door  
Handle.

## SEWAGE PURIFICATION

New illustrated book on modern  
methods of sewage purification

POST FREE ON APPLICATION

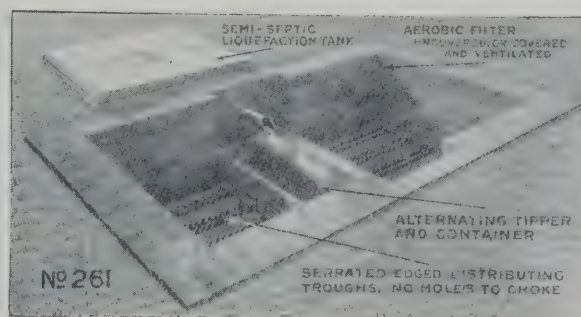


Cesspools and septic tanks promote *putrefaction* not purification, and produce a septic liquid, poisonous in just the same sense that a septic wound is poisonous—a menace to health.

A bacterial, purification filter, having its outlet at the bottom, is essential, for the treatment of the tank liquid, the process being only complete when the whole of the carbon, hydrogen and nitrogen originally present are combined with the maximum amount of oxygen which they are capable of taking, or are dissipated, in the case of the third-named element, in the free state in gaseous form. We start with substances containing the above elements in what is known as organic combination, and finish with carbon as carbonic acid, all the hydrogen as water and the nitrogen as nitric acid or as free nitrogen, which are classed as inorganic or mineral. We guarantee these results.

We have specialised in this work for many years, and can refer you to successful schemes and satisfied clients in every county in this country, in Australasia, Malay, India, Egypt, West Indies, etc.

Please favour us also with your enquiries for automatic Sewage Lifts, Sewage Ejectors, for raising low level sewage from basements, drains,



etc.; and Manhole Covers, Step Irons, Flushing Syphons Penstocks, Flap Valves, Vent Columns, etc., for sewerage at housing schemes, etc.

Swimming Bath Water purified by our Mechanical Water Pressure Filters.

Sectional Booklets No. 50, dealing with Sewage Lifts and Sewage Ejectors; Sewerage and Sewage Disposal; Country House Sewage Schemes; Water Softening and Filtration; on application, post free British Isles.



## Tuke & Bell Ltd.,

Sewage and Water Specialists,  
27 Lincoln's Inn Fields, W.C.2  
London



# LION FOUNDRY Co. Ltd.

ARCHITECTURAL, STRUCTURAL & SANITARY IRONFOUNDERS



Progress Co-operative Society's Building, Glasgow. Architects: Messrs. John Keppie and Henderson, F. and A.R.I.B.A., Glasgow. Cast Iron Window-Breasts made at Lion Foundry.

KIRKINTILLOCH  
near GLASGOW

CAST IRON BUILDING  
FRONTS, INFILLS  
and WINDOW-BREASTS  
a SPECIALITY.

*Makers also of*

Verandahs, Shelters,  
Canopies, Balconies, Balus-  
trading, Bandstands,  
Fountains, Public Con-  
veniences, Lamp Pillars for  
Gas and Electric Light,  
Iron and Steel Stairs of  
every description,  
Rain Water Pipes, Heads  
and Gutters, Soil Pipes,  
Gates, Railings, Finials, etc.

# BLAKE'S RAMS

WINDMILLS, OIL ENGINES & PUMPS

For Raising Water for Mansions, Cottages, Farms and Villages

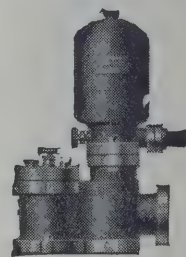
Send for Catalogue No. 44



Ram.

Oil Engine.

Windmill.



Self-Acting Rams

*Schemes carried out for*  
His Majesty the King  
H.R.H. The Duke of Connaught  
His Grace The Duke of Buccleuch  
His Grace The Duke of Devonshire  
His Grace The Duke of Westminster  
His Grace The Duke of Cleveland  
His Grace The Duke of Portland  
His Grace The Duke of Sutherland  
His Grace The Duke of Leeds  
His Grace The Duke of Marlborough  
His Grace The Duke of Grafton  
His Grace The Duke of Somerset  
His Grace The Duke of Bedford  
His Grace The Duke of Rutland  
His Grace The Duke of Roxburghe

(Self-Acting Pumps)

No Coal

No Oil

No Steam

No Labour

No Cost for

Motive Power

Send for ILLUSTRATED  
BOOK No. 44 on ESTATE  
WATER SUPPLY

# JOHN BLAKE Ltd., Accrington, Lancashire.

ESTABLISHED 60 YEARS.





243.

## NOVEL DECORATIVE EFFECTS · with S.X. BOARD

Many and varied are the effects obtainable with "SX" Board—the panelling possibilities offer wide scope for ingenuity and artistic ability. The panelling strips may be painted to contrast, to harmonise, or to be uniform with the board itself—dark and heavy to suggest period panelling, or light and delicate as the requirements suggest. The panels themselves may be small and intricate, or broad and simple, or they may be almost dispensed with on the walls of all but very large rooms by fixing the board lengthwise, with the joints at the cornice, frieze, dado and skirting.

# 'ESSEX' BOARD

THAMES BOARD MILLS LTD PURFLEET. ESSEX.

Mayfair Hotel,  
Berkeley St., W.

Architect:

W. Henry White,

F.R.I.B.A.

Contractors:

Edcasters Ltd.,

Doncaster.

1,500,000 to 2,000,000

"Phorpres" Fletttons  
supplied.

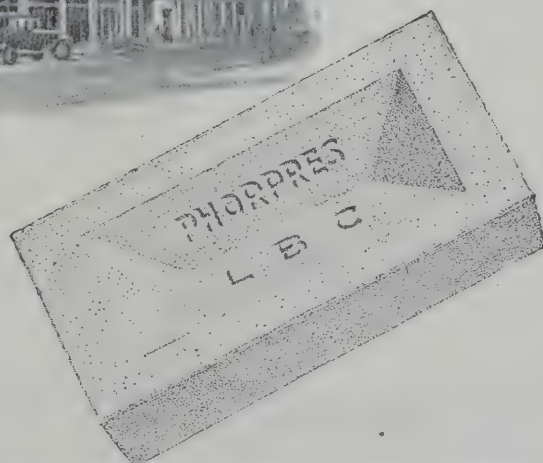


## "PHORPRES" FLETTONS

LONDON BRICK CO. & FORDERS Ltd.  
Head Office, Africa House, Kingsway, W.C.2

Telegrams: "Phorpres, Westcent, London."

Telephone: Holborn 0303 (5 lines).







MESSRS BIBBY & SONS, LTD.  
MILL AT LIVERPOOL GLAZED  
WITH THOUSANDS OF FEET OF  
BRITISH SHEET GLASS BY  
MESSRS WILLIAMS & WATSON  
LTD. LIVERPOOL.

## SPECIFY BRITISH SHEET GLASS

for

PUBLIC BUILDINGS  
FACILITIES  
OFFICES

HOUSING SCHEMES  
WAREHOUSES  
CONSERVATORIES

because of its

DURABILITY

FLATNESS and  
UNIFORMITY IN  
THICKNESS

GOOD CUTTING

Constant improvement in the manufacture of Pilkington's Sheet Glass has almost eliminated surface irregularities—reduced distortion to a minimum—increased weather resisting properties—and ensured good and easy cutting

BE SURE  
IT IS...  
BRITISH

# PILKINGTON BROTHERS ~ LIMITED

ST. HELENS



LANCASHIRE

## Remember— you are building for *to morrow*

When making up your specifications, it is in the interest of your client to allow for the Patent Peveril Stove, because this Stove has many unique features.

1. It saves fuel by means of the Patent Draught Valve which enables the user to regulate fuel combustion.
2. There is practically no danger of smoky chimneys and no chimney cowl is needed.
3. Danger from fire is eliminated because the fire is *not* on the hearth.
4. Prolonged life of tiles in panels, which the Peveril holds in position and protects from injury and smoke stain.



## The Patent PEVERIL STOVE

Supplied through Ironmongers & Builders' Merchants

*The Catalogue of the Peveril Stove, printed in colours, has proved invaluable for reference. It will give us pleasure to forward you a copy on receipt of post card request.*

Sole Makers and Patentees

**R. RUSSELL & SONS, LTD.**  
Dept. R., Peel Foundry, DERBY.





## Estimating

*Architect:* You will notice that you have to quote for "Vulcanite" roofing.

*Estimating Clerk:* It certainly costs less, sir, but is it cheaper in the long run?

*Architect:* Absolutely! Not only is its first cost lower, but my experience proves it to be unequalled for durability.

*Estimating Clerk:* In that case, sir, I am surprised at its low initial cost.

*Architect:* I was surprised when I discovered its real value. It is always watertight—and fire-proof, too, when covered with sand and gravel or  $\frac{1}{2}$  inch of tar macadam. What's more it remains in first-class condition for longer than anything else I know.

*Estimating Clerk:* "Vulcanite" then must be a very popular roofing.

*Architect:* It deserves to be. I for one *always* advise it. I would stake my reputation on it.

"VULCANITE" roofing is used under the London Building Act and the By-laws, etc., of all Borough and Urban District Councils; and is accepted by all the leading Fire Insurance Companies as an Insurance Tariff Roof

We shall be pleased to have your request for our Illustrated Booklet, and to supply detailed drawings and estimates free.

VULCANITE FLAT ROOFING  
is supplied and fixed only by

# VULCANITE<sup>LTD</sup>

## FLAT ROOFING SPECIALISTS

Seven Stars Bridge | Stour Rd. Old Ford  
Wigan | London E.3

Phone 0737

Phone EAST.0253

ALSO AT BELFAST AND GLASGOW



## A Bank Director Speaks

"When considering the question of safe and strong room installation it is impossible to overlook the record of the House of Tann."

"Although the firm has been established over 130 years—40 years longer than any other firm of safe-makers in existence—no John Tann fire and burglar resisting safe or strong room has ever had its contents destroyed or stolen."

"130 years without a failure!—such a record—unique in the history of safe-making—demonstrates more forcibly than any words the remarkable degree of security achieved and maintained by John Tann Safes and Strong Rooms."

## JOHN TANN

### Safes & Strong Rooms

Architects seeking the maximum security for their Clients' possessions should consult the Technical Dept. of John Tann, Ltd., on any question relating to Safe or Strong Room installation

Catalogue & Estimates gratis

JOHN TANN, LTD., 117 Newgate St., London, E.C.

Telephone - - - Central 9772/3

Telegrams: "SAFEJOTAN, LONDON."

## EXPERIENCE

---

## Widest

EXPERIENCE is, in reality knowing things. We have dealt for so many years with Steel Construction in all its phases that we have the right material to offer you promptly. With intelligent anticipation of your wants, we stand ready to render immediate help. Experience of our service has always given the utmost satisfaction.

### ARCHIBALD D. DAWNAY & SONS, LTD.

CONSTRUCTIONAL STEEL ENGINEERS,  
STEELWORKS ROAD, BATTERSEA, S.W.11.

Telephone: Battersea 1094 (3 lines). Telegrams: "Dawnay, Battsquare, London."

AND AT EAST MOORS, CARDIFF.

Telephone: Cardiff 2557.

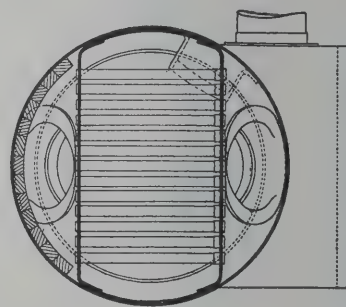
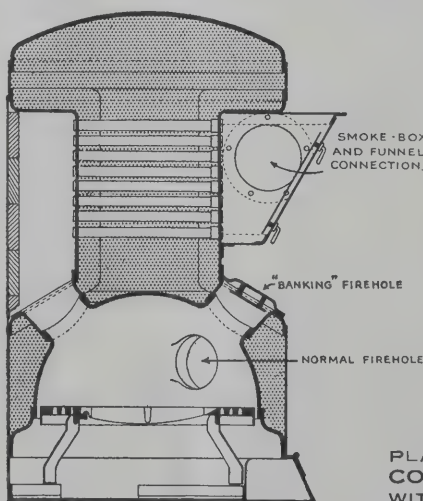
Telegrams: "Dawnay, Cardiff."

## COCHRAN HOT-WATER BOILERS FOR HEATING AND SERVICE SUPPLY

THESE Boilers retain all the constructional advantages of the Standard Cochran Boiler. They can be supplied for a working pressure of 100 lbs. per square inch (i.e., for use with a head of 230 feet of water), and, with reasonable care, will last indefinitely. In addition the Cochran Boiler as a Hot-Water Unit occupies less floor space than any other type of boiler. When compared with Cast-Iron Sectional types, the higher efficiency and greater durability of this boiler will soon repay the greater initial cost; while possessing these same advantages over the Steel Sectional and Wrought Welded boilers, the prices are below these types. Further, when considered for the larger Heating Schemes a saving of anything up to £500 can be effected as compared with built-in types of boilers, owing to the entire absence of brickwork setting, etc.

Also, it must be emphasised that the smoke-box of the Cochran Boiler enables it to be installed in any position relative to an existing underground system of flues, or brick stack.

Cochran Hot Water Boilers are made in sizes to give an output (reckoned on two hourly stoking intervals and a transmission factor of 6,500 B.T.U.'s per sq. ft. H.S.) of from 300,000 to 6½ million B.T.U.'s per hour.



PLAN AND SECTION OF STANDARD COCHRAN HOT-WATER BOILER WITH UPPER BANKING FIREHOLE

These boilers, or ALTERNATELY OUR WORLD FAMOUS STEAM UNITS (in respect of Steam Heated Installations), should be specified for every proposition calling for initial Economy, Ultimate Durability and Highest Efficiency.

Write for full particulars:

### COCHRAN & CO., ANNAN, LTD.

Head Office & Works: ANNAN, SCOTLAND. Telegrams: MULTITUBE, ANNAN. Telephone: 2 ANNAN

London Office:

137, VICTORIA STREET, S.W.1

Telegrams: MULTITUBE, SLOANE, LONDON

Telephone: VICTORIA 9341 (3 lines)





TIFFANY'S PREMISES, LONDON Architect: A. W. MOORE, Esq., F.R.I.B.A.

BRONZE SHOP FRONTS, DOORS, CAPS & BASES  
By H. H. MARTYN & CO., LTD.

Architectural  
Decorators



To H.M.  
King George V.

By Appointment

# H. H. MARTYN

& CO., LTD.

CHELTENHAM

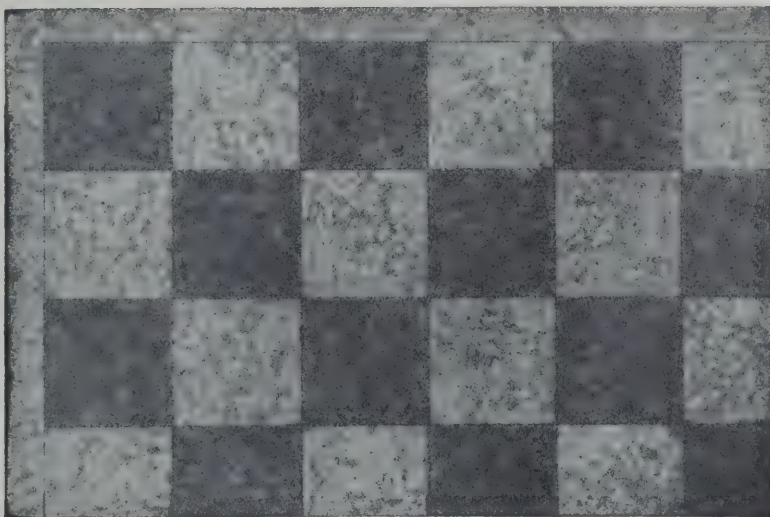
5 Grafton St., Bond St., London

ARCHITECTURAL  
DECORATION  
IN ALL  
MATERIALS  
to Architects' own designs

Enquiries Invited

## "KULMCO" Improved Compressed CORK Parquet

is laid in Messrs. Liberty's new building



WEARS BETTER THAN OAK

LAI D IN SECTIONS ON WOOD  
OR CONCRETE WITH SPECIAL  
MASTIC

DUSTLESS, WARM, UNAFFECTED  
BY TEMPERATURES

ELEGANT IN APPEARANCE

EASY TO CLEAN AND KEEP  
IN GOOD ORDER

PLEASANT TO THE TREAD

GUARANTEED

National Physical Laboratory Tests on Application

NOTE.—It was not possible to print the illustration  
in a cork shade and therefore it does not convey the  
actual rich appearance of cork. Colour Booklet and  
full particulars will be sent free on application to:—

## HORACE W. CULLUM & CO., LTD.

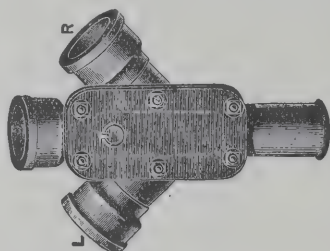
50/52 BRITANNIA STREET, KING'S CROSS, LONDON, W.C.1

'Phones : 1797 & 0812 Museum

Wires : "Kulmco, Kincross, London"

## CAST IRON GAS-TIGHT SYSTEM of HOUSE DRAINS

By installing our gas-tight  
INSPECTION CHAMBERS



with bolted cover all possibility of sewer gas leaks through porous brickwork of manholes or faulty bedding of manhole covers is eliminated and the whole system from interceptor to top of ventilating pipe will be recorded absolutely tight under one final test with an air gauge.

These INSPECTION CHAMBERS are stocked 4 in. and 6×4 in. diamr. with one to eight branch inlets in 43 different combinations each. A large variety is also stocked 5×4, 5×5, 6×5, 6×6, 9×4, 9×6 and 9×9 inch diameters.

All other connections are stocked in similar variety and prompt delivery of orders can always be relied upon.

PRICES  
LOWEST CURRENT ALWAYS

**BURN BROS. (LONDON) LTD.**  
6, 6a & 8 Stamford St. & 3 Blackfriars Rd.  
**LONDON, S.E.1**

## DURESCO



**FIRST  
and  
FOREMOST**

If you  
**SPECIFY DURESCO**  
results will **ALWAYS**  
meet with your approval.  
**DURESCO** saves time and  
irritation. It is at once the  
most satisfactory, the most  
durable and the most artistic  
wall covering available, suit-  
able for **NEW PLASTER**  
as well as for all other surfaces  
usually painted.

For true economy and in your clients' interests  
**SPECIFY DURESCO**

**DURESCO** does not crack, chip, flake, rub off  
or wash off. It is durable, reliable, washable,  
permanent out-of-doors and indoors and is the  
**most economical wall-  
covering possible.**

*Full particulars and Tint-book from  
the Manufacturers*

**The SILICATE PAINT Co. Ltd.**  
**CHARLTON, S.E.7**

Telephone:  
Greenwich 0036

Telegrams:  
Orr, Char, London

*or from their Sole Agents*



THE  
ORIGINAL  
  
THE  
BEST



THE  
MOST  
EXTENSIVELY  
USED

A plain statement of the truth

**“OUT—OF—THE—WAY”**  
AND  
**“AROUND—THE—CORNER”**  
**SLIDING DOOR FITTINGS**

*Particulars will be gladly sent upon request to*

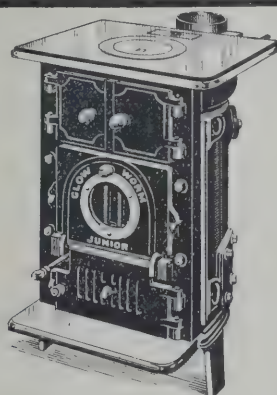
**GEO. W. KING, LTD.**

**WINDMILL LANE,  
STRATFORD, LONDON, E.15**

Phones : Maryland 2703/4.

Works : HITCHIN, HERTS.

Grams : Agrikinger, London



**THE LATEST WORD IN  
BOILERS**

A new boiler has just been added to the Glow-Worm Series. It is a masterpiece in design, very efficient as a raiser of Hot Water, extremely attractive in appearance, and (an important feature this) has the largest open fire of any boiler on the market.

THE

**NEW**

**GLOW-WORM**

**JUNIOR**

**THE BOILER WITH THE LARGEST OPEN FIRE**

One other feature of the NEW Glow-Worm Junior is the fact that it is fitted with a **SHAKING BOTTOM**. This fitment, which is a distinct advantage when using Coke and particularly for the use of anthracite, ensures easy stoking,

avoids dust and saves much labour. The amount of fuel consumed by the NEW Glow-Worm Junior is very small indeed. In fact, the money saved on fuel more than pays for installation in less than two years.

We respectfully suggest that you specify a Glow-Worm on every possible occasion. Prices from £8 10s. For full particulars write

**O. BRUSTER & RICHARDSON, 4 LLOYDS AVENUE, LONDON, E.C.3**



**GEORGE WRIGHT (LONDON) LTD**  
 Established 1854. Telephone: Museum 8033

Are the claims made for  
 Wright's Everbrite Fire  
 substantiated?

There is no law to prevent a manufacturer from making a claim concerning his product that he believes or hopes to be true. But performance is an acid test of all such claims. The steady increase in the sales of Wright's Everbrite Fires over many years is evidence that their performance does not belie the claims made for them. Let us send you a copy of our Illustrated Booklet of the Everbrite Fire.

**19, NEWMAN ST., LONDON W1**  
 Works: Burton Weir, Rotherham

# Kinnell's

## CENTRAL HEATING

### and HOT WATER SUPPLIES

Modern Installations for every description of Public and Private Building.

Our Heating Schemes are based on the experience of 40 years, and ensure economy in upkeep and highest efficiency.

We have recently installed Bickley Church, and have received the following testimonial:

*"Universal appreciation of the very satisfactory results of the adequate heating of this large church. Temperature secured with the utmost ease."*

The services of Experienced Engineers are always at the disposal of our Clients.

**CHAS. P. KINNELL & CO. LTD.**  
 65-65a, SOUTHWARK ST., LONDON, S.E.1

Telegrams: "Kinnell-Boroh, London."

Telephone: Hop 0362







## COMBINITE-BITUMEN

### IDEAL FOR FLAT OR GARDEN ROOFS

**M**cNEILL'S have been covering roofs since 1833. The evolution of the Building Industry during the last century largely reflects, therefore, the evolution of McNeill's. To-day the characteristic feature in this continuing process of evolution is the growing popularity of the Flat Roof. We are able to read aright the Sign of the Times, because of the demand made on us by our "Combinite-Bitumen" Roofing.

This roof is laid by our own experienced workmen—two or three ply—as approved by the Architects' Technical Bureau. Absolutely waterproof, weatherproof, fire-resisting and highly non-conducting. Very durable, no cost of maintenance. Has great advantages over asphalt and metal on all flat roofs, whether boarded or concrete, as it is more economical both in first cost and in maintenance.

If in doubt or difficulty telephone McNeill's—They will gladly send a Special Representative.

## F. McNEILL & CO. LTD.

Telegrams:  
"EYEBALL," LONDON.

*Government Contractors for 80 years.*

Telephone:  
CLERKENWELL 1643  
(3 lines).

LAMB'S PASSAGE, BUNHILL ROW, LONDON, E.C.1.  
ESTABLISHED NEARLY A CENTURY

# MATTW. T. SHAW & CO. LTD.

ESTABLISHED 1850 LONDON

## CONSTRUCTIONAL ENGINEERS & BRIDGE BUILDERS

On Admiralty and War Office  
Special "Manufacturers List."

Telegrams: "CONSTRUCTIVE IRONWORKS"  
PHONE: LONDON."

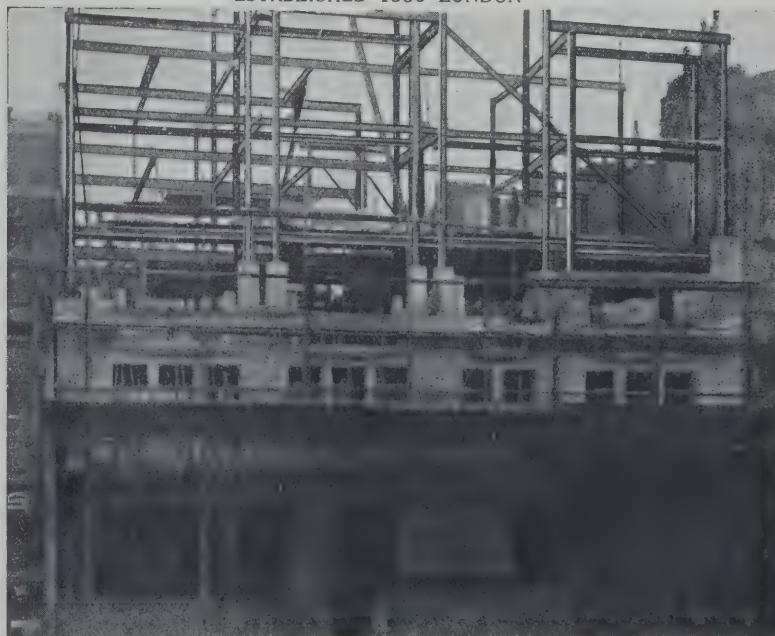
Telephone No.: EAST 3754 (2 lines).

*High-class Constructional Steelwork  
for Architects, Designed & Executed  
to suit all purposes.*

*Experienced Engineers are always  
available by appointment for con-  
sultation and to advise on all  
matters connected with Construc-  
tional Engineering Work.*

LARGE STOCKS OF ALL SECTIONS AND PLATES

OFFICES WORKS, COVERED  
STOCKYARDS AND WHARVES



MILLWALL, LONDON, E.14

## VARNISHES

For every requirement in decorating.

## ENAMELS

**ALBAGLOSS** in separate varieties for interior and exterior.

**ALBAMATTE** (flat) for interior use only.

## ANTI-DAMP

A Protective Covering for Brick, Stone, Cement, etc.

## SILICO-FERRIDINE

A Preservative Paint for Steel and Iron Work.

*Nobles & Hoare, Ltd.*

Cornwall Road, Stamford Street, LONDON, S.E.1.

# "PERMANITE" RECTANGULAR SLATES.

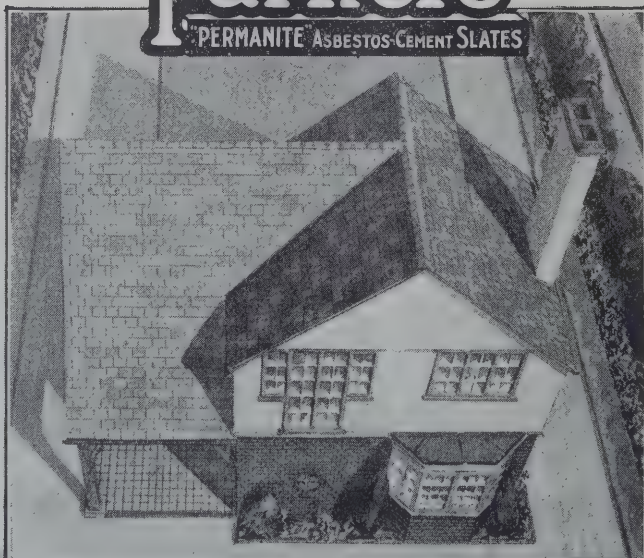
ASBESTOS-CEMENT.

The selection of a Roofing is a matter of importance for both owner and architect.

### "PERMANITE"

Asbestos-Cement Slates are supplied in a variety of attractive colours, including Russet-Brown, Red, Blue or Dark Grey. They are light compared with natural slates and tiles, and if this fact is considered when the roof is designed a saving in the structure may be effected without loss of stability.

**Turners'**  
"PERMANITE" ASBESTOS-CEMENT SLATES



### TURNERS' PRODUCTS INCLUDE:—

Rectangular Slates. Diagonal Slates. Flat Sheets for lining walls, partitions, ceilings, etc.

"Enduro" Tiles for domestic buildings. Turners' Trafford Tiles and Sheets for industrial buildings.

Waterproofed Asbestos Sarking Felt.



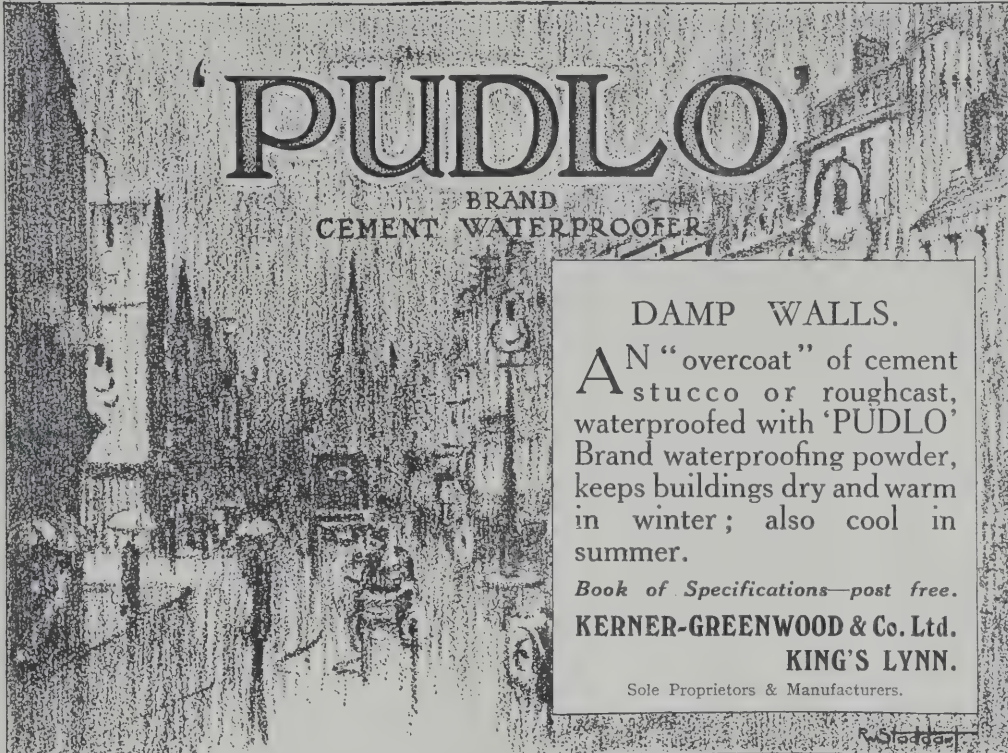
Application of materials undertaken in any part of the United Kingdom by a competent staff of specially trained fixers. Our technical department is at the service of clients.

London: 130, Fenchurch St.  
Birmingham  
Gannon Terrace, Gannon St.

**TURNER BROTHERS ASBESTOS CO., LTD., TRAFFORD PARK, MANCHESTER.**

Newcastle-on-Tyne: 4, Mosley St.  
Glasgow: F. G. Price & Co., Ltd.  
Limpet Works, Carmyle.





# ‘PUDLO’

BRAND  
CEMENT WATERPROOFER

**DAMP WALLS.**

AN “overcoat” of cement stucco or roughcast, waterproofed with ‘PUDLO’ Brand waterproofing powder, keeps buildings dry and warm in winter; also cool in summer.

*Book of Specifications—post free.*

**KERNER-GREENWOOD & Co. Ltd.**  
**KING’S LYNN.**  
Sole Proprietors & Manufacturers.

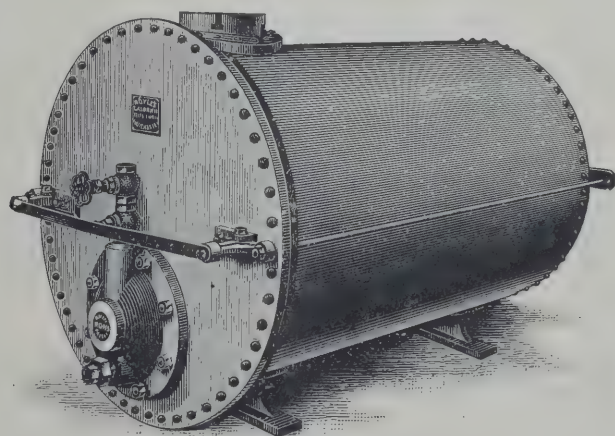
B. &amp; M. St.

The word ‘PUDLO’ is the registered Trade Brand of Kerner-Greenwood & Co., Ltd., by whom all articles bearing that Brand are manufactured or guaranteed.

## ROYLES LIMITED

*Engineers and Specialists*

Have a very valuable experience in the making of Heating Plant—  
This information is at the disposal of the Architectural Profession.



ROW'S PATENT  
STORAGE PATTERN CALORIFIER  
STEAM HEATED AUTOMATIC CONTROL.  
ALSO MADE FOR HEATING WATER BY WATER

**ROYLES LIMITED, IRLAM, Nr. MANCHESTER**

Telephone: 133 and 134 IRLAM

Telegrams:

ELYOR

IRLAM

Many thousands of these Heaters are working in the most important Institutions in this country and abroad, giving unqualified satisfaction.

Our Bound Catalogue containing valuable information will be sent to Architects free on request.

Makers of many other specialities of interest to steam and water users.

ROYLES Ltd. do not fix; they leave that to the Heating Engineer.

ROYLES Ltd. reserve themselves to the manufacture of first-class specialities for the Trade.



ROW'S PATENT  
HEATING CALORIFIER  
WITH AUTO CONTROL.

## CEPHASITE STONE PRESERVATIVE

(Regd. and Patented)

**Cephasite** is not merely a waterproofing liquid which forms a temporary film on the stone, but is an actual stone hardener. It contains no oil or wax, and is, therefore, not a mere mechanical filler. **Cephasite** actually hardens the stone by a chemical process, which induces in the stone the durable qualities which are so noticeable in the highest grades of stone. Please note that **Cephasite** is not a "cure all" for all kinds of stone. It is made for the hardening and preservation of all classes of sandstone and brick, but is not recommended for use on limestone or cement, the chemical constitution of sandstone and limestone being entirely different.

**CEPHASITE** should be used because:—

- |   |   |
|---|---|
| <p>(1) It is a permanent, not a temporary preservative.</p> <p>(2) It does not discolour the stone or give it the artificial appearance which all preparations containing oil do, but leaves it with its natural appearance, so that, apart from its increased durability and hardness, it is impossible to tell that the stone has been treated.</p> | <p>(3) It can be applied to damp stone, and in any kind of weather except frost, while successive coats can be applied at short intervals, thus saving the expense of keeping up scaffolding, etc.</p> <p>(4) Applied to decaying stone it stops decay and renders the stone permanently hard.</p> <p>(5) Sulphuric Acid and other chemicals in the air have no action on <b>Cephasite</b> treated sandstone.</p> |
|---|---|

Full particulars from the Sole Manufacturers:  
**ANDERSON, GIBB & WILSON**  
**EDINBURGH**

ESTABLISHED 1810.

Phone VICTORIA 0138.

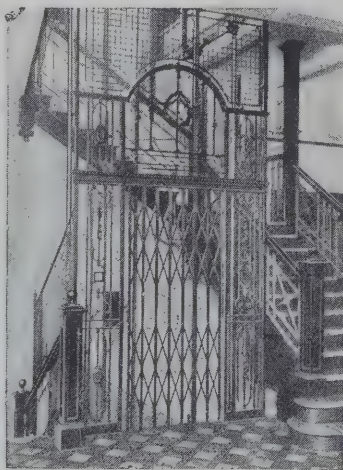
## Z. D. BERRY & SONS

Regency Street,  
 Westminster, S.W.1.

## CENTRAL HEATING

HOT WATER SUPPLIES.  
 DOMESTIC ENGINEERING.

OUR EXPERIENCE and SERVICE at the disposal  
 of all ARCHITECTS.



### ECONOMY

S.M.S. Lifts are unsurpassed for their low working costs. You should send for a copy of our free booklet which deals fully with this aspect of a lift installation. Actual figures of the current consumption of a large number of lifts are clearly shown.

# SMS LIFTS

Smith, Major & Stevens Ltd.

LONDON AND NORTHAMPTON

Branches for Maintenance Service in all Principal Towns.

SD  
15-83

Since  
1770

FOR  
 PARTICULARS OF THE

# PANEL

INVISIBLE

## HEATING SYSTEM

APPLY TO

**ROSSER & RUSSELL L<sup>TD</sup>.**  
 HEATING SPECIALISTS

37 DUKE ST. 21 AIRE ST.  
 LONDON, W.1 LEEDS.  
 Tel: MAYFAIR 5733



# METRO-VICK SUPPLIES LTD.,

(Proprietors: METROPOLITAN-VICKERS ELECTRICAL COMPANY, LIMITED)

## FOR ALL TYPES OF ARTISTIC ELECTRIC LIGHT FITTINGS

BIRMINGHAM:  
Daimler House, Paradise St.

CARDIFF:  
Custom House Street.

LONDON: Metro-Vick House,  
155, Charing Cross Road, W.C.2.

LEEDS:  
9, East Parade.

NEWCASTLE-ON-TYNE:  
"Cosmos House,"  
7, Saville Row,

BRISTOL:  
43, Park Street.

EDINBURGH:  
127, George Street.

GLASGOW: Metro-Vick House,  
74, Waterloo Street.

MANCHESTER:  
14, Long Millgate.

SHEFFIELD: Howard  
Gallery, Chapel Walk.

S/G. 60

Don't say "White Lead"—  
— say **Cookson's**

OVER 9,000 tons of Foreign White Lead were imported into the United Kingdom during 1925. Safeguard your clients' interests by specifying COOKSON'S—THE BEST ALL-ROUND BRITISH WHITE LEAD.

"Every ounce carries the Cookson guarantee of quality"—and Cookson's quality is recognised as a standard throughout the world.

The Best All-round British  
**WHITE LEAD**



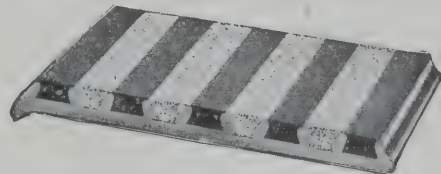
THE COOKSON LEAD & ANTIMONY COMPANY, Ltd.  
MILBURN HOUSE, NEWCASTLE-ON-TYNE.

## STEPS & LANDINGS

OF WOOD, STONE, CONCRETE OR IRON  
can be made

**PERFECTLY SAFE**  
by fitting

## MASON'S PATENT STAIR TREADS



The **CHEAPEST** and **MOST DURABLE**  
**NON-SLIP**  
**STAIR TREAD OBTAINABLE**

In use on the staircases at the premises of Messrs. Bourne & Hollingsworth, John Barkers, Ltd., Pontings, Ltd., Derry & Toms, and many other well-known Stores and Public Buildings.

**FIRST IN 1893**

**UNEQUALLED 1926**

Samples and Quotations gladly furnished free

## THE SAFETY TREAD SYNDICATE, LD.

**Crown Wharf Ironworks**  
**OLD FORD, LONDON, E.3**

Phone:  
EAST 1486

Telegrams:  
"Unslipping, Hackwick," London

# ASPHALT



# WORK

SPECIFY

**THE LIMMER & TRINIDAD LAKE ASPHALT CO., LTD.**  
AND SECURE THE BEST MATERIALS AND WORKMANSHIP.

Branches throughout the British Isles.

Chief Office: 34, VICTORIA STREET, S.W.1

Telephone: Victoria 8315 (4 lines).  
Telegrams: Limmer, Sowest, London.

ESTABLISHED 1871

# LIFTS

Electric,  
Hydraulic and  
Hand Power  
for all purposes.

## WAYGOOD-OTIS, LTD.

54-55, Fetter Lane, E.C.4  
62-63, Lionel Street, Birmingham  
And principal Provincial Cities and Abroad

## "EXPAMET" EXPANDED METAL.

*The Ideal Reinforcement for  
Foundations, Floors, Walls,  
Roofs and all forms of  
Concrete Construction.*

## "B.B." EXPANDED METAL LATHING.

*The Ideal Lathing for plaster  
in ceilings, steelwork encasing,  
solid and hollow partitions,  
and other plaster work.*

"EXPAMET" is used in every class of building construction, plaster work, concrete work and brick work. Details of its innumerable uses and advantages, together with designs and advice, will be sent free on application.

## THE EXPANDED METAL CO. LTD.

*Patentees & Manufacturers of Expanded Metal*

*You key to building economy*  
**EXPAMET**  
REG.

York Mansion, PETTY FRANCE,  
LONDON, S.W.1.

Works: WEST HARTLEPOOL.  
ESTABLISHED OVER 30 YEARS.

## F. J. BARNES, Ltd.,

The Portland Stone Quarries, Steam  
Saw Mills, Masonry & Turning Works.

The oldest established Quarry and Masonry Business  
in Portland.

ESTABLISHED OVER 40 YEARS.

The PORTLAND STONE used in the following Buildings came from  
these Quarries and Masonry Works.

### Piccadilly Hotel.

Architect, W. WOODWARD, Esq., F.R.I.B.A.

### Madame Louise Buildings, Oxford Circus.

Architect, FRANK VERITY, Esq., F.R.I.B.A.

### London Joint Stock Bank, Kingsway.

Architects, Messrs. R. CREESE HARRISON & SON, F.R.I.B.A.

### Waldorf Hotel.

Architects, Messrs. MARSHALL, MACKENZIE & SONS, F.R.I.B.A.

### London City & Midland Bank, Bond Street.

Architect, T. B. WHINNEY, Esq., F.R.I.B.A.

### New Building in Kingsway, for W. Robinson, Esq.

Architect, E. L. LUTYENS, Esq., F.R.I.B.A.

### Messrs. Warings' Premises, Oxford Street.

Architect, R. FRANK ATKINSON, Esq., F.R.I.B.A.

Registered Office—PORTLAND, CORSET.

Telegrams: "BARNES, PORTLAND." Telephone No. 2.

London Office—L. & S.W.R., 25, Nine Elms Lane, S.W.

Telegrams: "BARNES, 25, NINE ELMS LANE."  
Telephone No.: 1479 Brixton.

## BRITISH FIBROCEMENT WORKS, LTD.

The largest and best equipped Factory in the World.  
Contractors to the Admiralty and War Office.

## ASBESTOS-CEMENT MANUFACTURERS



### CORRUGATED SHEETS

(4' to 10', 3" and 5" corrugations;  
width 30" and 45").

FIBRO FIVES (45" wide, 5" corrugations;  
lengths 4' to 8').

"FIBROTILES" (4' to 8' x 3' 10").

### ROOFING SLATES

(12" x 12", 15 1/2" x 7 1/2", 15 1/2" x 15 1/2",  
24" x 12", 24" x 24").

### DUCHESS AND LADIES SIZE

for straight cover (colours: Grey, Red,  
Blue-Black and Antique Brown).

Manufactured only at

## ERITH, KENT,

Head Office and Works.

Telephone: 88 Private Branch Exchange.

London Office: Central House, Kingsway, W.C.2.

Telephone: Gerrard 6483.

Manchester Office: 97, Bridge Street.

Telephone: City 7856.

Birmingham Office: 14, New Street.

Telephone: Central 7292.

Bristol Office: West India House, 54, Baldwin Street.

Telephone: Bristol 272.

Manufacturers also of "FIBRENT" High Pressure Jointings, Boiler  
Coverings, Millboard, etc.

Also at Glasgow, Swansea, Dublin and Belfast.



## CENTRAL HEATING ELECTRIC LIGHTING TURBINES

Complete Installations for  
Country Houses, Factories,  
— Public Institutions —

ESTABLISHED OVER 25 YEARS

**Tamplin & Makovski**  
—ENGINEERS— LTD.

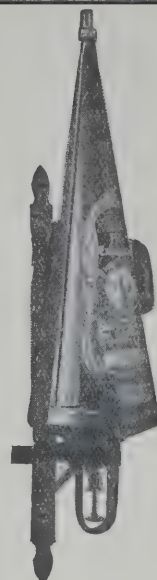
LONDON

18, CHARING CROSS RD. W.C.2

REIGATE

BELL STREET

REIGATE 114



*The Sign of  
Security*

SECURE CONTINUAL FIRE  
PROTECTION WITH ONE  
INITIAL OUTLAY BY PRO-  
TECTING YOUR BUILDINGS

WITH

**“MINIMAX”**

THE CHEMICAL HAND  
**FIRE EXTINGUISHER**

Which combines the MINIMUM of  
size and weight with the MAXIMUM  
of efficiency and economy

*Write for Leaflet No. 612  
containing full particulars.*

**MINIMAX, LTD.**

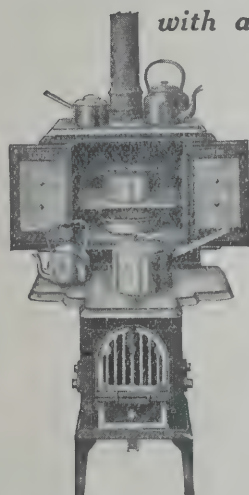
*Head Office and Works:*

**FELTHAM, MIDDLESEX**

*(“Minimax” Registered Trade Mark)*

## Cooking and Hot Water Supply from One Fire

with a **SENTRY**  
BOILER and  
OVEN



**SENTRY MINOR No. 0**  
In Cast Iron, fitted with  
Oven and Hobs

The “Sentry” Minor Oven is  
made to work with No. 0 and  
No. 1 “Sentry” Boilers. It  
fits over the smoke outlet of  
the boiler and the waste heat  
from the boiler fire passes  
round the sides of the Oven  
before going into the chimney.

The Oven is provided with  
sliding doors, and this enables  
the interior of the Oven to be  
inspected without the removal  
of pots from the boiler hot plate.

The combination as illustrated  
costs £15 7s. 6d.

*Full particulars from the Makers:*

Telephone: **WOOD, RUSSELL & CO., LTD.** Telegrams:  
Museum **“Woorus,”**  
**9341** **34 Oxford St., LONDON, W.1** **Westcent,**  
(3 lines) **London**

*(Makers of the “SENTRY” Gas Fires)*

## “VAENGALED” WELSH GREY SLATES

GIVE

An artistic and distinctive appearance;

Perfect toning with all surroundings  
and with old work—no raw,  
new appearance. Ideal for rural  
environments.

Unquestionable durability in any  
atmosphere, eliminating the cost  
of repairs, barring accidents.

**At a lower cost than any  
other slate on the market.**

Made in the usual sizes and also in Randoms for graduated  
courses. Used on numerous important Public Buildings

*Full Particulars from the Sole Producers:*

**The Abergynolwyn Slate & Slab Co. Ltd.**

**Grove Chambers,  
CARNARVON.**

Telegrams: **Roofs, Carnarvon.** Telephone: No. 164 Carnarvon.

Contractors to  
**H. M. GOVERNMENT**

**SMITH & RODGER, LTD.**

**ELLIOT ST.,  
GLASGOW.**

**MANUFACTURERS OF HIGHEST CLASS QUALITY OF DECORATORS' PAINTS**

FINELY GROUND IN PURE-LINSEED OIL.

NATURAL WHITE PAINT, Non-Poisonous.

DECORATORS' WHITE ENAMEL, Brilliant.

PROOF PRIMING VARNISH, Reliable, Unique,

NATURAL WOOD STAINING BODY, for Floors, &c.

WEATHER-PROOF WHITE PAINT, Durable.

DECORATORS' DISTEMPER, Fine Colours, Strong.

PROOF PRIMING PAINT, Dries very quickly.

SPIRIT VARNISHES, Highest quality, all kinds.

The above are a few of SMITH & RODGER'S many Specialities.

**MANUFACTURE ALSO HIGHEST CLASS QUALITY SPIRIT VARNISH, POLISH, &c.**

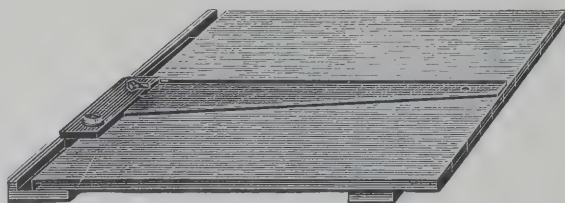
TRADE

**STANLEY**

MARK

The Largest Manufacturers of  
Surveying and Drawing Instru-  
ments in the World.

QUALITY UNSURPASSED.



STANLEY-HOWARD DRAWING BOARD AND TEE SQUARE.

Latest "M.45" Catalogue sent Post Free on application

**W.F. STANLEY & Co. Ltd.**

286, HIGH HOLBORN, LONDON, W.C.1.

**MATONE** Flat Oil Paint  
gives to interior walls  
and ceilings, without  
stippling, a velvet-smooth  
matt surface in colours which  
never fade and which can be  
scrubbed. The unique colour  
range meets every decorative  
need.



**Berger  
Paints**

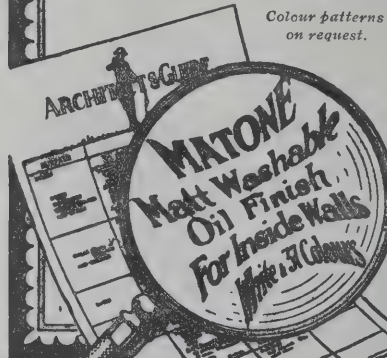
Colours Enamels Varnishes

Colour patterns  
on request.

MATONE  
Flat Oil Paint.  
EXILAC  
White Enamel.  
MATROIL  
Washable  
Water Paint.  
POMPEIAN  
Two-Coat  
Gloss Paint.  
BERGELAC  
Inside and out  
Varnish.

Lewis Berger  
& Sons, Ltd.

HOMERTON,  
LONDON, E.9.



Telephone Nos.

SLOUGH 228

229

230



Telegrams—

NAYLOR,  
SLOUGH.

**NAYLOR'S**

SUPERFINE

**White Decorative Varnish**

(SUWIDEC).

A pale brilliant Oil Varnish, suitable for finishing over white or delicately tinted Paint and Wall Papers, drying in 12 hours in a temperature of 60° Fahr., quite free from bloom. It is also recommended for exterior work, being extremely durable and impervious to atmospheric influences.

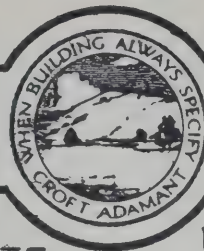
**NAYLOR BROTHERS (London), Ltd.**

SLOUGH, BUCKS.

Established 1800.



CROFT



ADAMANT

CROFT ADAMANT ARTIFICIAL  
STONE IS A PERFECT SUBSTITUTE  
FOR NATURAL STONE AND LESS COSTLY

MAY WE SUBMIT  
SAMPLES & ESTIMATES?

CROFT GRANITE, BRICK & CONCRETE CO. LTD.  
CROFT NEAR LEICESTER TEL 13 & 14 NARBOROUGH: TELMS. "ADAMANT" CROFT

### *Subscription List Closing Shortly.*

*A Re-Issue of*  
*"Original Views*  
*of London as*  
*it is, By Thomas*  
*Shotter Boys, 1842."*

*With Descriptive Notes to*  
*each Plate and a short*  
*Introduction by E. Beresford*  
*Chancellor, M.A., F.S.A.*

The Series is reprinted by the half-tone process in an uncoloured state, but the frontispiece is reproduced in colour from an undoubted original coloured plate, as an example of Boys' colour work.

This is the only complete Re-Issue of Boys' London Lithographs, and the edition is strictly limited. The size of the volume will be approximately 12 in. by 9 in. and will be bound in quarter cloth.

To subscribers the Work is offered at the special rate of £1 5s. od. net. After publication the price will be increased to £1 10s. od. net.

*A List of Subscribers will be printed in the book.*

THE ARCHITECTURAL PRESS, 9 QUEEN ANNE'S GATE, WESTMINSTER, S.W.1

## THE PENMAENMAWR & TRINIDAD LAKE ASPHALT Co. LTD.

invite

**ARCHITECTS and SURVEYORS**

to send their enquiries for

**ASPHALT WORK OF EVERY DESCRIPTION**

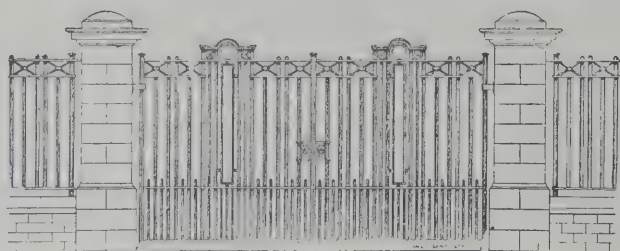
**First Class Workmanship — Competitive Prices.**

Chief Office: 41, NORTH JOHN STREET, LIVERPOOL.

Telephone: CENTRAL 2431.  
Telegrams: ROADWAY, LIVERPOOL.

## IRON GATES AND RAILING

Architectural Wrought Metal Work.



**HILL & SMITH, Ltd., Brierley Hill, Staffs.**

## HENRY WALKER & SON, Ltd. NEWCASTLE-ON-TYNE

**EXPERTS IN HEATING.**

HOT AND COLD WATER SUPPLIES.  
VENTILATION. COOKING APPARATUS  
AND DOMESTIC ENGINEERING.

**SEND FOR LIST.**

Showrooms for Grates, Chimney-pieces, etc.—55, Westgate Road  
Foundry and Iron Works—Gallowgate.

## SQUASH RACQUET COURT

Walls finished with

**CARTER'S SELF-COLOURED NON-SWEATING COMPOSITION**  
are universally admitted to be the best.

Complete NEW COURTS or The SPECIALIST WORK,  
namely:—WALL SURFACE, COURT DOORS, FLOORS,  
LIGHTING, executed in all parts of the British Isles  
and Continent.

**G. H. CARTER, LTD.** *Specialists in Courts for all Sports.*

*Head Office:*  
Clissold Works, 57-69 GREEN LANES, N.16 (Phone Clissold 6921),  
also Evelyn House, 62 Oxford Street, W.1 (Phone Museum 8654).

New Courts or Improvements by us (amongst others) at Conservative  
Club, St. James's Street, R.T.Y. Club, Knightsbridge, Cavendish  
Club, Piccadilly, M.C.C., Bristol, Magdalen College, Oxford, Leeds,  
Stockport, etc.

# FALDO'S

## ASPHALTE

*Its reputation is your guarantee*

SWANSEA.

LONDON.

MANCHESTER.

NEWCASTLE.

*If you are interested in any branch  
of*

## ARCHITECTURE AND BUILDING

*you are invited to write for a free copy  
of BATSFORD'S NEW ILLUSTRATED  
CATALOGUE which contains 96 pages  
of particulars of numerous helpful books*

**on**

ARCHITECTURAL HISTORY, DESIGN, AND  
PRACTICE—BUILDING CONSTRUCTION—  
INTERIOR DECORATION—PERIOD FUR-  
NITURE — ORNAMENT — DECORATIVE  
CRAFTS — SKETCHING — DRAWING —  
LETTERING—AND ALL SUBJECTS CON-  
NECTED WITH PRACTICAL BUILDING

*Unique Stock of Old and New Books always on view*

**B. T. BATSFORD, LTD.**

*Architectural Art Publishers & Booksellers*

94 HIGH HOLBORN, London, W.C.1

## THE BATH & PORTLAND STONE FIRMS, Ltd.

*The largest producers  
of both BATH and  
PORTLAND Stone.*

Estimates given for Block,  
sawn, worked, or fixed complete.

**BATH. LONDON.  
PORTLAND & MANCHESTER**



**ART PAVEMENTS  
& DECORATIONS LTD**  
ESTABLISHED 1859.

OFFICE & WORKS  
ST. PAUL'S CRESCENT · CAMDEN TOWN, N.W.  
SHOWROOM · 51 MORTIMER ST. W.

**MOSAIC & MARBLE.  
PARQUETRY.  
"MEDMENHAM" TILES.**

"BIANCOLA" <sup>WALL LINING,  
& PAVING.</sup>  
(regd)

"GRANITINE" <sup>PLINTHS &  
PARTITIONS.</sup>  
(regd)

"ARMADEK" <sup>(regd)</sup>  
· JOINTLESS FLOORING ·

BRANCH OFFICES  
MANCHESTER · DUBLIN · BIRMINGHAM

*Thermax.*

**RUSTON  
BOILER**

*Less Fuel Costs*

Why burn 10 cwt. of fuel  
in a Vertical Cross Tube Boiler  
when the same evaporation  
can be obtained in a  
*Thermax*  
Boiler?

This result—proved by USERS—is  
made possible by the large  
internal heat surface, the  
arrangement & disposition of  
the tubes—combined with  
unique facilities for cleaning.

*Power Users are invited to  
write for prices—and all  
further details to the makers*

Ruston & Hornsby Ltd.  
Lincoln—England.

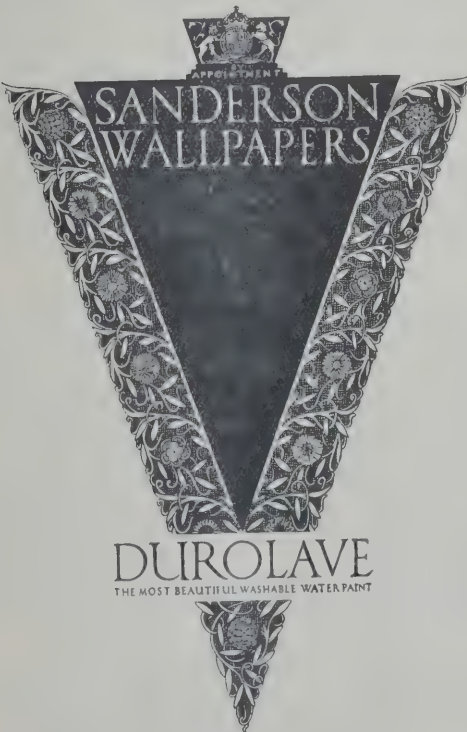
*Catalogue "Steam Boilers"  
Circular 100—London S20*



**SANDERSON  
WALLPAPERS**

**DUROLAVE**  
THE MOST BEAUTIFUL WASHABLE WATER PAINT

ARTHUR SANDERSON & SONS LTD.,  
52, 53, 54, 55, BERNERS STREET, LONDON, W.1.



**The "SANKEY"**  
Down Draught Preventing Pot

Architects, in increasing  
numbers, are favouring the  
"Sankey" Pot, the reason being  
its effectiveness in curing smoky  
fireplaces, coupled with its  
beautiful appearance.

Designed on quite original lines,  
it entirely obviates zinc cowls and  
tops which rattle and creak in every  
breeze.

"Sankey" Down Draught Pre-  
venting Pots are made in Red, Buff,  
and Saltglazed Clays, and are prac-  
tically everlasting.

"Sankey" Pots, owing to their  
beautiful simplicity of design, go well  
with any type of architecture. They  
fall into the general scheme as if  
they were part of the architect's  
original plan.

Please write for Illustrated  
Booklet and full particulars.

**J. H. SANKEY & SON LTD**

HEAD OFFICE:  
Essex Wharf, Canning Town,  
London, E.16.

ESTABLISHED 1857





ROSE PLOT, FRINGED  
POOL, FERNED GROT,  
THE VERIEST SCHOOL  
OF PEACE

STONE FOR  
CRAZY PAVING,  
ROCK, WALL AND  
WATER GARDENS

STONE SEATS, ARCH-  
WAYS, PERGOLA  
PILLARS, BORDER  
STONE

Telephone 182

**ASHTON & HOLMES, LTD.,** Quarry Owners  
SUTTON SIDINGS, MACCLESFIELD

**Charles Bradley & Son**

Penn Road  
Watford

Phone:  
Watford  
402.

**REVOLVING DOORS**

Made, Erected  
and Repaired

**REVOLVING DOORS**  
FOR 15 YEARS.

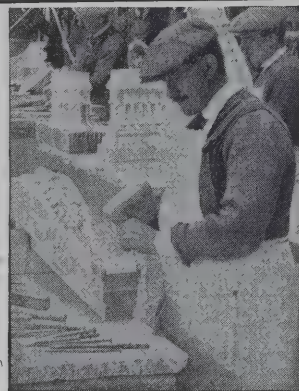
## SPANISH TILES

ARE BEST for ARTISTIC WORK AND DURABILITY  
SAMPLES & FULL PARTICULARS ON APPLICATION

<b>BEST</b> <b>8 × 8</b> WHITE WALL	<b>RED</b> <b>11 × 5½</b> FLOORING	<b>RED</b> <b>9 × 9</b> FLOORING	<b>BEST</b> <b>9 × 3</b> WHITE WALL	<b>RED</b> <b>8 × 8</b> FLOORING
---	--	--	---	--

LARGE STOCKS IN LONDON.  
LOWEST POSSIBLE PRICES CON-  
SISTENT WITH HIGHEST QUALITY

**A. VALLS, 36/38, NEW BROAD ST., E.C.2 (City 5181)**



We execute

**Marble**  
and  
**Granite**

Work of every kind.

**FENNING**  
AND COMPANY, LTD.  
HAMMERSMITH  
LONDON, W.6.

Telephone:—RIVERSIDE 0820 & 0821

## LUXFER

DOMES LIGHTS  
CEILING LIGHTS  
LANTERN LIGHTS

The Luxfer Co. manufacture all constructions through  
which Daylight is admitted into a building.

16, HILL STREET, FINSBURY, E.C.2

**ORNAMENTAL**  
**IRON RAILING AND GATES,**  
HAMMERED  
IRONWORK



Catalogue Free.

**BAYLISS, JONES & BAYLISS, LTD.**  
WOLVERHAMPTON & CANNON ST., LONDON.

## VITREOSIL

HEAT PROOF GAS GLOBES

Give a soft, rest-  
ful light of great  
efficiency, with  
total absence of  
mottle glare; are extremely  
artistic in appearance, and  
being absolutely unbreak-  
able by heat they save the pocket. Vitreosil  
globes and bowls for electric lighting are  
unsurpassed for beauty and efficiency.

Write for Illustrated Lists (post free) **The Thermal Syndicate Ltd. (Dept. B.A.)**  
Head Office & Works: Wallsend-on-Tyne, England.  
London Office & Depot: 28, VICTORIA STREET S.W.1

THE OLD-ESTABLISHED  
AND RELIABLE FIRM OF

**GRANOLITHIC**  
**SPECIALISTS**

SEND YOUR ENQUIRIES TO THE  
**GRANO-METALLIC PAVING**  
**AND PLASTERING CO. LTD.**  
557, LEA BRIDGE RD. E.10.

PHONE: WALTHAMSTOW, 0703.



# CONVEYORS ELEVATORS CHUTES

OF ALL KINDS AND  
FOR ALL PURPOSES

WRITE FOR ILLUSTRATED CATALOGUE



We specialise in the design and construction of every type of labour-aiding device and are open to give estimates and advice at any time.

## W. & C. PANTIN ENGINEERS

147, UPPER THAMES STREET  
LONDON, E.C.4

Works: WOODFORD, ESSEX

Telephone  
City 6790 (5 lines).

Telegrams  
Pantinko, Cannon, London.

# Buy your Gold Leaf and Ribbon Gold

*DIRECT from*  
**JAMES SMITH & Sons**

(GOLD BEATERS) LTD.

Gold Leaf and Ribbon  
Gold Manufacturers, &c.,

39 & 41, BRIDGE ST.,  
MANCHESTER.



## MODERN GLASSHOUSES

Replete with the latest improvements in construction, ventilation and heating, based upon experience extending over more than half a century as specialists in this class of work.

*Architects' Designs carefully carried out.*

Special Catalogue with numerous illustrations on application.

## MESSINGER & CO., LTD.

Horticultural Builders and Heating Engineers

**LOUGHBOROUGH, Leicestershire**

London Office: 122 VICTORIA ST., WESTMINSTER, S.W.1

Telephone: 691 Loughborough; 1209 Victoria, London.

**REVOLVING SHUTTERS**  
IN  
WOOD OR STEEL  
SUNBLINDS & FOLDING PARTITIONS  
**ARTHUR THORNBOROUGH, LTD.**  
HAMPDEN LANE  
TOTTENHAM, N. 17.  
GRAND  
"ALFRESCO"  
RESTAURANT  
LONDON  
PHONE: 2356  
2357  
TOTTENHAM

Scottish Representatives: JAS. G. JAMIESON & Co., 141, West Regent Street, Glasgow, C.2. Telephone: Douglas 1577.



*Every Architect should send for this  
Folder—write for yours now.*



## WATERTIGHT Pavement Lights at Last

Pavement Lights fixed on Stone Curbs leak and cause serious damage to property. But fitted with Lees' Patent "Statite" Curbs the joints are watertight and last as long as the superstructure.

No Stone Curbs. No repair bills. As specified for the New Manchester Telephone Exchange by H.M. Office of Works.

**Alexander Lees, Building Speciality Engineer**  
2 Blue Boar Court, Manchester

## Is the Best Material for

Vertical and Horizontal  
Dampcourses, Flat Roofs,  
Paving, Etc.

Telegraphic Address:  
"Traversable, Ave  
London."

**VAL DE TRAVERS** ASPHALTE  
MASTIC ASPHALTE.  
PAVING CO. LTD.

'Phone Nos:  
London Wall  
3067 & 3068

106, SALISBURY HOUSE,  
FINSBURY CIRCUS, E.C.2.

Sole Proprietors of the celebrated  
PYRIMONT-SEYSSSEL MINES IN FRANCE



## SIMPLEX LEAD GLAZING

For ROOFS, SKYLIGHTS and HORTICULTURAL WORK

No special Contract Required  
No Zinc, Iron or Putty used

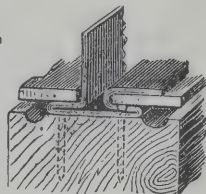
ANY QUANTITY SUPPLIED

Millions of superficial feet in use

**GROVER & CO. Ltd.**

Engineers

BRITANNIA ENGINEERING WORKS,  
CARPENTERS ROAD, STRATFORD, E.15



Write for Illustrations.  
Full particulars sent on application.

## ASPHALTE

FOR HORIZONTAL AND VERTICAL DAMP-COURSES.  
FOR FLAT ROOFS, BASEMENTS, STABLES, Etc.

The Best Material only and the Best Workmanship are supplied by

**THE FRENCH ASPHALTE CO. LTD.**

5, Laurence Pountney Hill, Cannon St., E.C.

The Company uses *only* the Asphalte from its own Mines  
in the Seyssel-Basin and at St. Jean-de-Maruéjols, France.  
CONTRACTORS TO THE PRINCIPAL GOVERNMENT DEPART-  
MENTS, COUNTY & BOROUGH COUNCILS, RAILWAYS, Etc.

Provincial work executed by skilled workmen on most  
moderate terms. For Prices and full particulars apply  
at the Offices of the Company.

## BOOKS FOR THE ARCHITECT

A large stock of new and old books  
on design, on theory, on practice  
CATALOGUES FREE

*Nearly Ready*

"Chimney-pieces and their Decoration in  
England, from the 15th to the Middle of  
the 19th Century." By G. C. ROTHERY

**JOHN TIRANTI & Co.,** Maple St., London, W.1

Telephone - - Museum 0579

## WALL AND CEILING BOARDS

"SUNDEALA" is used extensively for lining walls and  
ceilings in Housing Schemes and buildings gener-  
ally. Being ABSOLUTELY WATERPROOF, Bungalows,  
Sports Pavilions, Garages, are practically constructed  
of "SUNDEALA" both externally and internally.

"SUNDEALA," beside being ABSOLUTE WATERPROOF,  
is an insulator against heat and cold, homogeneous,  
will not laminate, crack or warp. It can be  
STEAMED AND BENT, painted, enamelled, distem-  
pered, stained and FRENCH POLISHED, remains flat  
indefinitely, and matures and improves with age.

"SUNDEALA" is made in two qualities—various  
thicknesses and sizes to suit all purposes—  
including embossed and decorated panels in Tile,  
Oak and Leather Effects.

Samples and particulars sent with pleasure on application to  
"C" DEPT.

**The Patent Impermeable Millboard Co. Ltd.**

Patentees and Manufacturers

**SUNBURY COMMON • MIDDLESEX**

Contractors to War Office, Ministry of Health, London  
County Council, and all Principal Builders, Contractors,  
Railway and Steamship Companies of the world.

'Phone: 32 Sunbury. Telegrams: "Millboard, Sunbury Common."

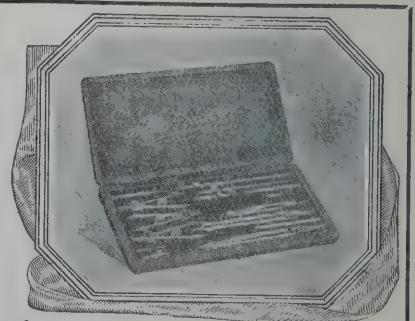
Or to the Agents:

**G. D. PETERS & CO., Ltd.,** Caxton House, Westminster, S.W.1

Your Instruments  
may make or  
mar your future!

¶ As a draughtsman your  
future is bound up in two  
things—your ability to de-  
sign and the effectiveness in  
which they are portrayed.

¶ You cannot do good work  
with poor instruments. In  
fairness to yourself equip  
with **THORNTON**  
BRITISH INSTRU-  
MENTS.



*A.C. Thornton*  
LIMITED.

"You sense their superiority  
as soon as you handle them."

PARAGON WORKS, 81, KING STREET WEST, MANCHESTER



# H. C. TANNER, 18, Campbell Road, HANWELL, W.7

SUCCESSOR AND LATE MANAGING DIRECTOR,  
**ARTHUR LEE & BROS., LIMITED**  
**EXPERT IN MARBLE DECORATION**

*Recent Contracts:—*

St. Mary's, Nottingham  
 S. Mary Magdalen, Paddington  
 Manchester University  
 School of Pathology, Oxford

Les Lauriers, Jermyn St.  
 Howard Hotel, London  
 Crooked Billet, London  
 Leopard Arcade, York

Telephone: EALING 1234.

Telegrams: "TANNER EALING 1234"

PILKINGTON'S TILE  
 & POTTERY CO. LTD  
 CLIFTON JUNCTION  
 MANCHESTER

PLAIN OR ENRICHED  
 TILES AND GLAZED  
 CERAMIC MATERIAL

LONDON OFFICE & SHOWROOM  
 37 & 38. SHOE LANE E.C. 4

## COUNTRY HOUSE LIGHTING & HEATING



We have over 21 years' experience in the design of complete installations of Electric Lighting, Heating, and Power purposes. Our installations have been remarkably successful in giving complete satisfaction to our numerous clients.

We stake our reputation on our work continuing to give satisfaction after completion, and make it our business to see that it does so.

*We invite your enquiries, and will be pleased to furnish estimates for the erection of plants in any part of the country.*

**H. J. CASH & Co. Ltd.**

CAXTON HOUSE · WESTMINSTER · S.W.1  
 Telephone - - - - VICTORIA, 4490 & 4491

## CAFFERATA & CO., LTD.

MANUFACTURERS OF—

PLASTER OF PARIS to suit every purpose. KEENE'S and PARIAN CEMENTS. "VICTORITE" (Regd.) "MURITE" (Regd.) CAEN STONE CEMENT (for Internal use). HYDRAULIC CAEN STONE CEMENT (for External use). REINFORCED PLASTER PARTITIONS—Size:—3 ft. × 1 ft. in thicknesses of 2 in., 2½ in., and 3 in. PRESSED RED BRICKS.

*Fully descriptive booklets relative to these materials furnished on request.*

Telegrams:  
 "Cafferata, Newark"

**NEWARK-UPON-TRENT**

Telephone No. 109

**FIRE ESCAPES**  
**FIRE EXTINGUISHERS**  
**FIRE HYDRANTS & HOSE**  
**TELESCOPIC LADDERS, STEPS,**  
**TRESTLES, SCAFFOLDS.**

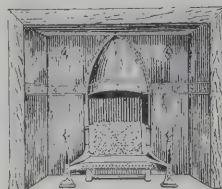
**HEATHMAN, PARSONS GREEN, FULHAM,**  
**LONDON, S.W.6.**

CITY SHOP: 35, ALDERSGATE STREET, E.C.1  
 (Near G.P.O.)

## ART-METAL SURROUNDS

**For all types of Fires**

In various styles and in  
 all Art-Metal finishes



Recessed  
 Canopy Surround

**F. TURNER**  
 61, 62 & 63, Summer Hill Street,  
 BIRMINGHAM.

PATENT REGULATING SPRING HINGES, &c.  
 PATENT "INVINCIBLE" DOOR SPRINGS

Established over  
 100 Years

**William Newman & Sons**  
 Limited

ARCHITECTS  
 are requested to write to  
 any factor for our Price List and to  
 mention our Goods in their specifications  
 Hospital Street, BIRMINGHAM



**CHURCH & HALL**  
 CHAIRS OF SEASONED TIMBER.

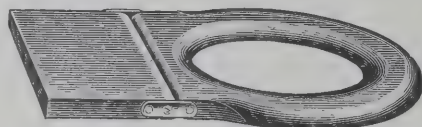
BEST WORKMANSHIP  
 CATALOGUE FREE ON REQUEST  
**MEALING BROS. LTD**  
 AVENUE CHAIR WORKS  
 WEST END ROAD HIGH WYCOMBE.  
 PHONE: HIGH WYCOMBE 499

## TUDOR PERIOD and OLD SHIP TIMBER

BEAMS, HALFTIMBERS, etc., CUT TO SIZES.

**CASTLES' SHIPBREAKING CO. Ltd.** 160, GROSVENOR ROAD,  
 LONDON, S.W.1

**WE HAVE MADE SANITARY SEATS EXCLUSIVELY for 36 YEARS**



Your Inquiries  
 are  
 Earnestly Solicited

**ROBERT McARD & Co. Ltd.**

CROWN POINT, **DENTON, MANCHESTER.**

LACQUERS, VARNISHES, POLISHES, FINE  
 COLORS, GLUES, OILS, BRUSHES AND  
 ALL MATERIALS for DECORATIVE WORK.

*High-grade Wax finishes  
 for Oak, etc.*

**W. H. PALMER & Co. Ltd.**  
**82 & 84, Old Street, E.C.1.**



## "SELLONITE" ENAMELS

Acid, Alkali, Steam, Oil and Petrol-Proof.

Made only by  
**THOMAS HOWSE, LTD.**  
 Union Works, Smethwick, Staffs.

For Laundries, Breweries, Laboratories,  
 Dyeworks, Refrigerators, Baths, and  
 Chemical Works, Kitchens, etc.

FULL DETAILS ON REQUEST.

Makers of Technical, Industrial and Decorative Enamels,  
 Japans, Paints and Varnishes, etc.

## WOOD BLOCK FLOORING AND WOOD PAVING OF EVERY DESCRIPTION.

**The Improved Wood Pavement Co., Ltd.** Telephone No.:  
 CITY 6533 (Two Lines)  
 BLACKFRIARS HOUSE, NEW BRIDGE STREET, LONDON, E.C.4.



# NORTHERN

ASSURANCE COMPANY LTD.

*Estab. 1836*

*Every kind  
of  
Insurance  
Transacted*

**Fire, Accident, Motor,  
Burglary, Life, Marine.**

ASSETS (1925) EXCEED

**£22,250,000**

Agency Appointments granted to Architects, Estate Agents, Auctioneers, etc., in a position to influence business.

HEAD OFFICES:

**1, MOORGATE, LONDON, E.C.2.**

**1, UNION TERRACE, ABERDEEN.**

# MEDWAY'S LIFTS

Branches in  
MANCHESTER  
LIVERPOOL  
BIRMINGHAM  
NEWCASTLE  
LEEDS  
GLASGOW  
BRISTOL  
BELFAST  
DUBLIN, &c., &c.

MAKERS OF ALL TYPES OF LIFTS

*Recent Contracts for Electric Lifts include:—*

- |    |           |                                 |
|----|-----------|---------------------------------|
| 13 | Lifts for | H.M. POST OFFICE.               |
| 9  | " "       | LEWISHAM HOSPITAL.              |
| 5  | " "       | WICKHAM'S, LONDON.              |
| 3  | " "       | DUNLOP RUBBER CO., LTD.         |
| 2  | " "       | FULCHER NURSES' HOME.           |
| 2  | " "       | LONDON, MIDLAND & SCOTTISH RLY. |
| 2  | " "       | LINOLEUM MFG. CO., LTD.         |
| 1  | " "       | WEST RIDING COUNTY COUNCIL.     |
| 1  | " "       | YORK HOUSE, TWICKENHAM.         |
| 1  | " "       | CAKEBREAD, ROBEY & CO., LTD.    |
| 1  | " "       | DAWSON BROS., CITY ROAD.        |
| 1  | " "       | WOODLANDS NURSES' HOME.         |
| 1  | " "       | DORKING HOSPITAL.               |
| 1  | " "       | KINGSTON HOSPITAL.              |
| 1  | " "       | GT. SCOTLAND YARD.              |
| 1  | " "       | ROYAL HOTEL, DERBY.             |
| 1  | " "       | 11 CHELSEA EMBANKMENT           |

&c., &c., &c.

**MEDWAY'S SAFETY LIFT Co., Ltd.**  
**1 & 2 SILEX STREET, BLACKFRIARS, LONDON, S.E.**

'Phone: Central 3671.

## SIEMENS AUTOPHONE SYSTEM OF AUTOMATIC TELEPHONE EXCHANGES



for  
Public Institutions,  
Offices,  
Factories,  
&c

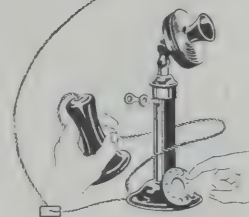
No exchange operators required.

Each office does its own switching from the dial.

Any number of offices may obtain intercommunication with only two wires leading from each telephone.

Instantaneous secret communication—day and night.

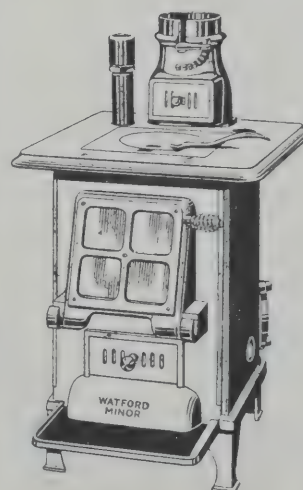
May be extended to include additional offices as required.



SIEMENS BROTHERS & CO LTD  
WOLWICH LONDON, S.E.13

## THE "WATFORD MINOR" WROUGHT STEEL BOILER

WITH BOTTOM WATERWAY.



The very latest and most efficient Boiler made for Domestic Hot Water Supply.

**UNBREAKABLE**

**WILL NOT BURST OR CRACK**

**VISIBLE FIRE**

**ALWAYS CHEERFUL**

**LOW FUEL CONSUMPTION**

*Will last longer than Cast Iron*

*Suitable for 30-gallon Cylinder*

**£9 10s. Od.**

The price is no more than for cast iron.

**STANDARD RANGE & FOUNDRY CO. Ltd.**

**Queens Road, Watford**

Telephone

761, 762, 763 Watford

Telegrams

"Standard, Watford."



**Simplicitas**  
PATENT  
**WATER TAP**

A simple and efficient development of the ordinary 'easy-clean' tap, the Simplicitas has many advantages over its predecessors. There are no exposed spindles, the combined cover and cross top permits easy access without turning off the water at the main, and covers are interchangeable.

Ask for prices and particulars from the Sole Manufacturers of the Simplicitas Water Tap

**SPERRYN**  
AND COMPANY  
MOORSOM ST BIRMINGHAM

## The Unchallenged Door

### WOCO DOORS

*have achieved an unique place in the Building World to-day*

These reliable, handsome, inexpensive doors, made by the largest Door Manufacturers in the world from their own Columbian Pine forests, under excellent labour conditions, are the choice of the leading Architects every time

### WOCO DOORS

*are unchallenged as regards :—*

1. Ideal conditions under which they are made.
2. Their quality and lasting value.
3. Their popularity as additions to home decoration.
4. Their unswerving economy of price.
5. Their service and guarantees.

## WOCO DOOR COMPANY

Telephone  
London Wall  
9902-4

**DASHWOOD HOUSE**  
**LONDON : E.C.2**

Telegrams  
"WOCODORS,  
Ave, London"

Phone : Bracknell 14,      Telegrams : Lawrence, Bracknell,

The Noted **T.L.B.** productions are produced only by  
**THOMAS LAWRENCE & SONS,**  
**BRACKNELL, BERKS,**  
and include—

- T.L.B.** RED RUBBERS, in varied shades.
- T.L.B.** Genuine HAND-MADE SANDFACED RED FACINGS.
- T.L.B.** Genuine HAND-MADE SANDFACED MULTI-COLOR FACINGS, in a large variety of distinct ranges, colors and textures.
- T.L.B.** Genuine HAND-MADE SANDFACED RED MOULDED BRICKS, to match bright red facings, or to contrast with multi-colors.
- T.L.B.** Patent SANDFACED ROOFING TILES, holed and nibbed, in varied shades of red and dark colours to match old roofs.

The Firm also manufacture and stock SEMI ROMAN TILES of various sizes, for window heads, narrow brick courses, panels, etc.

BRIQUETTES—KERBS and HOB BRICKS for fireplaces, etc.

Hand-made OVEN SQUARES and PAVING QUARRIES.

Special RED DUST and Fine CHIPS for tennis court surfaces, and many other specialities.

For colored illustrations of multi-colored facing bricks, etc., see advertisement in The Architects' Standard Catalogue.



## From the Architect's point of view.

Hall's Distemper exemplifies beauty allied to utility. To specify the most modern form of wall decoration is to ensure the finishing touch to your endeavours.

Light, space, cleanliness, permanence, artistry and an enhanced reputation are among the practical advantages derived from its consistent specification.

**HALL'S**  
DISTEMPER  
THE OIL-BOUND  
WATER PAINT

Prepared in 60 artistic shades.  
Tint book on application.

Sole Manufacturers:

**SISSONS BROTHERS & Co., Ltd. — HULL.**  
London: 203, Borough High Street, S.E.1



*For the Best Terra-Cotta,  
Blue Bricks & Chimney Pots,  
send for Quotations  
To The Hathern Station Brick & Terra-Cotta Co., Ltd.,  
Loughborough.*

*Telegrams - "Bricks" Hathern Station.  
Catalogue on application.*



### weathers any weather

ROK is a roof which cannot be affected by the worst storms, by heat or by cold. It has no joints for wind or rain to penetrate and it will last for years with the minimum of maintenance.

ROK is cheaper than slate or tiles. For bungalows, garages and all permanent buildings it is weatherproof, watertight and economical. Mineral Surface ROK or "ROK Flexible" Shingles make a roof both picturesque and practical.

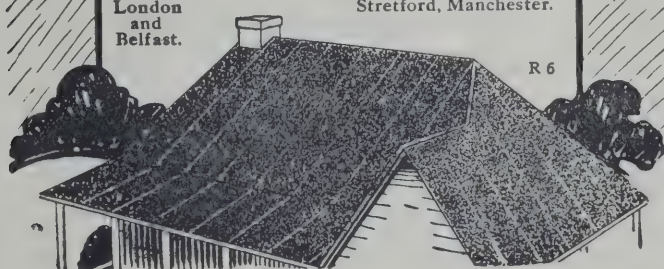
Your Ironmonger or Builder's Merchant will supply it. For samples and full particulars write to:—Mr. R. L. Stone, Sales Dept.

**D. ANDERSON  
& SON Ltd**

Also at  
London  
and  
Belfast.

Park Road Works,  
Stretford, Manchester.

R 6



## Another rise in Bonus

has been announced by the Scottish Widows Fund. The rate of Intermediate Bonus (to be allowed in respect of Claims and Surrenders) has been increased from 35s. to

**38s. PER CENT. PER ANNUM COMPOUND.**

The present is therefore a very favourable time to take out a "With-Profits" Policy. Let us send you a quotation for your age.

## Scottish Widows Fund

**AND LIFE ASSURANCE SOCIETY  
FOUNDED 1815. FUNDS: 25½ MILLIONS**

Head Office: 9, St. Andrew Square, Edinburgh  
(G. J. Lidstone, Manager and Actuary).  
London Offices: 28, Cornhill, E.C.3. & 17, Waterloo Place, S.W.1.

# Cabot's Quilt

**SOUND DEADENING  
ACOUSTICAL WORK  
HEAT & COLD INSULATION**

England, Wales and  
Ireland:

**HUNTLEY & SPARKS**  
46, King's Road,  
Sloane Square,  
London, S.W.3

Scotland:

**W. CARRICK HOWAT**  
121, West George  
Street, Glasgow

BUILDING CONTRACTORS' SECTION

ESTABLISHED 1876.

**H. SOMERFORD & SON,**

**BUILDERS,**

*High-Class Joinery - Decorations.*

Phone: Bat. 0602.

104, Manor St., S.W.4

**Wm. SHURMUR & SONS, Ltd.**

**BUILDERS.**

*Specialists in Executing—*

JOINERY TO DESIGN.

COLOUR SCHEME DECORATIONS.

HOUSE AND OFFICE SANITATION.

PLUMBING WORKS.

**Works Address: LONDON, E.5.**

Telephone: CLISSOLD 1897.

**Tel.: Padd. 1961.**

**F. FOXLEY & Co. Ltd.**

H. G. LESTER, F.I.O.B., Managing Director.

BUILDERS and CONTRACTORS

26 LEINSTER TERRACE, LANCASTER GATE, W.2

Large or Small.

Town or Country.

MODERATE ALWAYS.

**OGILVIE & Co.**

MILDMAY WORKS,

MILDMAY AVENUE,

ISLINGTON, N.1.

MANUFACTURERS OF HIGH-CLASS JOINERY.

**Builders & Decorators.**

TELEPHONE: CLISSOLD 1388.

TELEGRAPH: "OGILVIEJO, KINLAND, LONDON."

**LOUGHBOROUGH ROOFING TILES**

are made only by

**G. TUCKER & SON, Ltd.**

They are entirely Hand-made in the old fashioned manner. They are guaranteed against lamination and damage by frost, and every Tile bears our Brand, without which none are genuine.

MAKERS OF THE CELEBRATED "T.S.L." BRAND OF HAND MADE SAND STOCKS IN REDS AND MOTTLED COLOURS.

**LOUGHBOROUGH, LEICESTERSHIRE**

Reg. Tel. Address: "TUCKERS, LOUGHBORO."

**C. MISKIN & SONS, LTD.**

**BUILDERS**

ROMELAND, ST. ALBANS

and 1, LONG ACRE, LONDON, W.C.2

*All descriptions of*

Structural, Sanitary, and Decorative Work

Phones: ST. ALBANS 593; London 1588 Gerrard

WORK TENDERED FOR IN TOWN OR COUNTRY

Telephone:  
9 Castle Hedingham.

Telegrams:  
"Rippers, Castle Hedingham."

**JOINERY**

**FOR HOUSING**

**RIPPERS LTD.**

**CASTLE HEDINGHAM,  
ESSEX**

STANDARD CATALOGUE SENT  
ON APPLICATION.

**"HEMPSTEAD" HOLLOW  
PARTITION BLOCKS  
AND FLOOR BLOCKS**

IMMEDIATE DELIVERY OF STOCK SIZES.

FLOOR BLOCKS to suit Patentees' Requirements.

Address Enquiries:

**THE HEMEL HEMPSTEAD PATENT BRICK CO. LTD.**

76-8, SWINTON STREET, GRAY'S INN ROAD, LONDON, W.C.1.

Telephone: MUSEUM 4588. Telegrams: "LUGGDOM," LONDON.



**JONES & SEWARD, Ltd.**

COMPLETE BUILDING CONTRACTORS

FOR NEW BUILDINGS, ALTERATIONS,  
SANITATION OR DECORATIONS,  
IN BOURNEMOUTH OR COUNTRY.HEAD OFFICES:GRANVILLE CHAMBERS,  
YELVERTON ROAD,

'Phone: B'mth. 2447 (2 lines).

**BOURNEMOUTH.**

Telegrams: "REDECORATE."

**G. E. WALLIS & SONS, Ltd.**

LONDON and MAIDSTONE

Structural and Decorative Work  
of all descriptions.BROADMEAD HOUSE, 3, 4, & 5, KENRICK PLACE,  
PANTON STREET, S.W.1 BAKER STREET,  
4125 Gerrard W.1**HALL, BEDDALL & CO., LTD.**

(GEORGE PERRY NASH, GOVERNING DIRECTOR)

**PITFIELD WHARF, WATERLOO, S.E.1**

ALSO AT

31, BREAD ST., E.C.4

11, HANOVER ST., W.1

ESTABLISHED OVER A CENTURY

***Builders, Contractors, Decorators***

Telephones: HOP 0598 &amp; 6478

**George E. EVERITT & Sons Ltd.**BUILDERS, CONTRACTORS, SANITARY  
ENGINEERS & DECORATORS**SYDENHAM RD. NORTH**  
Telephone  
THORNTON HEATH 1883 (2 lines). **CROYDON**

Work Tendered for in Town or Country.

Phones HAMPSTEAD 6431 &amp; 8101.

ESTABLISHED 1846

**C. TAVENER & SON**BUILDING CONTRACTORS,  
DECORATORS.

112, FINCHLEY RD.,

29, DORSET ST.,

AND

HAMPSTEAD, N.W.

BAKER ST., W.

**SANITARY & HOT WATER FITTING.**Telephone } FARNHAM  
Telegrams } SURREY 9.ESTABLISHED  
OVER 70 YEARS.**MILLS & SONS**

(Late TOMPSETT &amp; CO.)

**BUILDERS,**

Steam Joinery Works,

**FARNHAM, SURREY.**

Churches, Hospitals and Country Residences.

REFERENCES FROM LEADING ARCHITECTS.

**J. B. SEWARD & CO.**

(HENRY DYKE, F.I.O.B.)

CROWN WORKS - WOKINGHAM

CONTRACTORS FOR BUILDING  
WORKS IN ANY PART OF THE  
COUNTRY. ENQUIRIES SOLICITED

ESTABLISHED 35 YEARS

ESTABLISHED OVER A CENTURY

Telephone:  
NORTH 0551Telegrams:  
BUILDING, NORDO, LONDON**PATMAN & FOTHERINGHAM**

LTD.

BUILDING CONTRACTORS

**Park Street, Islington, London, N.1**HIGH CLASS JOINERY  
REINFORCED CONCRETE WORK " " DECORATIONS



BY APPOINTMENT

LEAD-SEALED PELICAN BRAND  
OF  
**EARLE'S CEMENT**

*Manufactured by*  
G. & T. EARLE (1925) LTD.  
HULL  
*Estd. 1809*

**More than 80  
HOUSING SCHEMES  
are using MAJOR'S TILES**

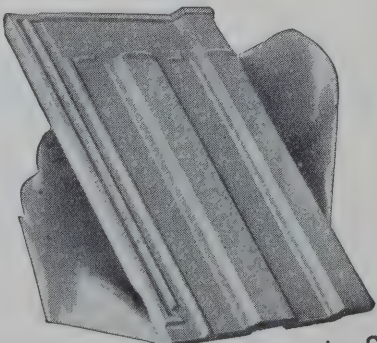
For these four reasons—

- 1 They weigh less—6½ cwts. of Major's per square against 11 cwts. of plain tiles.
- 2 They save labour—95 Major's needed per square instead of 600 plain tiles.
- 3 They need less timber—only 80 ft. of battens needed where plain tiles would require 300 ft.
- 4 Their cost is lower—approximately 13/- per square less than plain tiles.

Major's Patent Roofing Tiles have gained the highest awards in every competition since 1884. They must be the best.

*Let us send you full details*

H. J. & C. MAJOR  
LIMITED  
BRIDGWATER



*An artistic  
Grecian Tile  
that is grow-  
ing very pop-  
ular in good-  
class work.*

For information re-  
lating to Advertising  
in the Publications of

**The Royal Institute  
of  
British Architects**

*Apply to*  
**C. ROWLEY LIMITED**  
53-54 AVENUE CHAMBERS  
SOUTHAMPTON ROW, W.C.1

Telephone - - - Holborn 2807

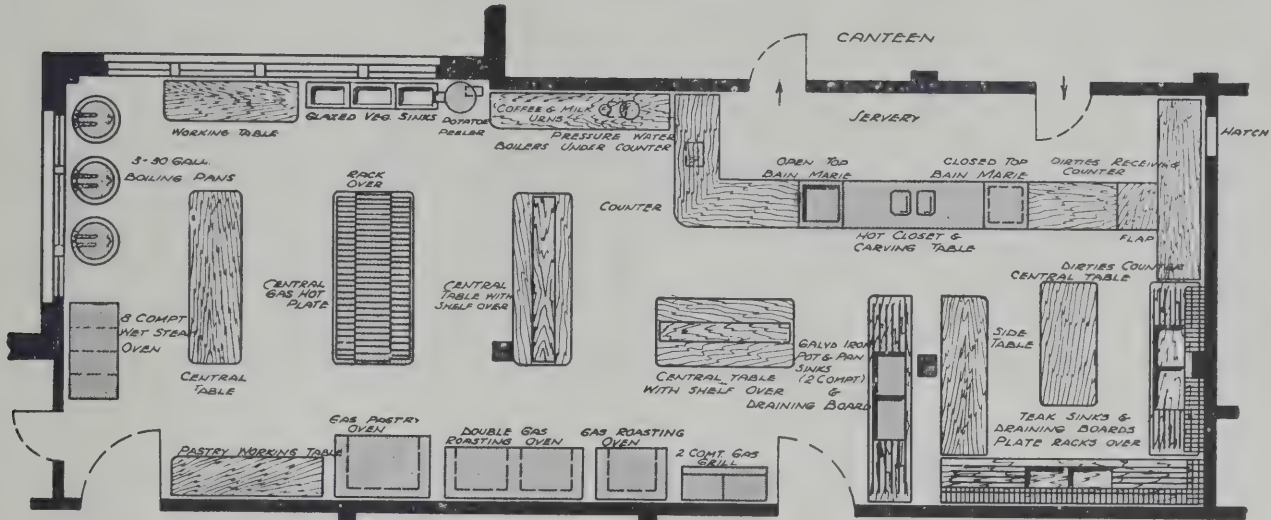


# BENHAM & SONS, Ltd.

Head Office: 64/66 Wigmore St.  
LONDON, W.1

Works: WANDSWORTH, S.W.

*Actual* MAKERS OF COOKING APPARATUS



The firm will be glad to assist architects in the preliminary stages of a job where there is a kitchen by advising and planning what, in their opinion, they consider is most suitable. The above was a suggested plan of a kitchen for a canteen.



Pattern P

D. O. Boyd's "Hygiastic"  
Independent Ventilating Stove

We have ready for issue a New Catalogue  
(No. 50)

Illustrating and describing

## D. O. BOYD'S HEATING AND VENTILATING GRATES

We shall be pleased to send Architects  
a Copy Free on application.

O'BRIEN, THOMAS & CO.

Offices and Showrooms:

17 & 18, UPPER THAMES STREET, E.C.4

(A few minutes' walk from St. Paul's Cathedral)

Foundry: EFFINGHAM WORKS, ROTHERHAM

Telephones:  
CHESTER 765-767

Telegrams:  
"RELIANCE," CHESTER

**"RELIANCE"**  
**METAL**  
**WINDOWS**  
**DOORS & SCREENS**  
**IN**  
**STEEL AND BRONZE**  
**FOR EVERY DESCRIPTION OF BUILDING**

LONDON:  
Sardinia House,  
52 Lincoln's Inn Fields, W.C.2  
MANCHESTER:  
80 Cross Street  
NEWCASTLE-ON-TYNE:  
Cross House, Westgate Road

**WILLIAMS & WILLIAMS, LTD.**  
**RELIANCE WORKS**  
**CHESTER**

GLASGOW:  
101 St. Vincent Street  
CARDIFF:  
21 Edward Terrace  
DUBLIN:  
17 South Frederick Street



*A "Sign" of  
the Times*

*'phone*  
**CHANCERY**  
**7422 or 7688,**  
*or write -*  
**41 EAGLE STREET,**  
**LONDON, W.C.1.**



# A Complete Course in Building and Architecture

## TO BE ISSUED IN 30 FORTNIGHTLY PARTS—PRICE 1/3

# PITMAN'S

# BUILDING

# EDUCATOR

Edited by R. GREENHALGH, A.I.Struct.E.

This magnificent work will provide a complete course of instruction in Architecture and Building, arranged in the form of a series of lessons. While the technical treatment by experts in their particular subjects will occupy the major portion of the work, many articles of general interest to all concerned with building will be included, so that the whole will form *a liberal education in Architecture and Building, and a complete work of reference.* The chief sections dealt with are—

ARCHITECTURAL DESIGN  
HISTORY OF ARCHITECTURE  
CARPENTRY AND JOINERY  
STRUCTURAL ENGINEERING  
BRICKWORK  
MASONRY  
PLUMBING  
DRAINAGE AND SANITATION  
SHOP-FITTING  
STAIRCASING AND HANDRAILING  
ARCHITECT'S OFFICE AND ROUTINE  
SPECIFICATIONS AND QUANTITIES

SUPERINTENDENCE  
LABOUR-SAVING APPLIANCES  
PRELIMINARY OPERATIONS  
CIVIL ENGINEERING  
BUILDERS' GEOMETRY  
BUILDERS' ACCOUNTS AND COSTS  
ESTIMATING  
PLAIN AND REINFORCED CONCRETE  
FIRE-RESISTING CONSTRUCTION  
BUILDING CALCULATIONS  
BUILDER'S OFFICE AND ROUTINE  
GAS-FITTING

HEATING AND VENTILATION  
ACOUSTICS  
ELECTRICAL FITTING  
PLASTERING  
PAINTING AND DECORATING  
ROOF COVERINGS  
SURVEYING AND LEVELLING  
BUILDING SCIENCE  
ARCHITECTURAL DRAWING  
CALCULUS FOR BUILDERS  
GLAZING  
BUILDING LAW

**THERE ARE 48 CONTRIBUTORS**—including eminent Architects and some of the foremost men in the Building Trade—among others:

SIR BANISTER FLETCHER, F.R.I.B.A., F.S.I.

PROFESSOR C. H. REILLY, F.R.I.B.A.

PROFESSOR A. E. RICHARDSON, F.R.I.B.A.

T. P. BENNETT, Esq., F.R.I.B.A., Hon. F.I.O.B.

J. ALFRED GOTCH, Esq., M.A., F.R.I.B.A.

PROFESSOR F. C. LEA, D.Sc., M.Inst.C.E.

PROFESSOR HENRY ADAMS, F.S.I., M.Inst.C.E.

PROFESSOR BERESFORD PITE, M.A., F.R.I.B.A.

F. E. DRURY, Esq., M.Sc.(Tech.), M.I.Struct.E.

WALTER R. JAGGARD, Esq., F.R.I.B.A.

PROFESSOR PATRICK ABERCROMBIE, M.A., A.R.I.B.A.

THE BUILDING EDUCATOR is intended for the use of Architects and their Pupils; Surveyors and their Assistants; Civil and Municipal Engineers; Builders and Building Supervisors, Foremen, Clerks of Works, etc.; Craftsmen; and all engaged in the various branches of Structural Work. Candidates preparing for the Examinations of the R.I.B.A., Builders' Institute, Institute of Structural Engineers and Surveyors' Institute, will find this work covers all requirements.

Never before has the Building Trade had so great an opportunity of acquiring technical knowledge in the handiest possible form, and at such a remarkably small cost.

Each part is fully illustrated with diagrams, photographs, and coloured plates.

**Price 1/3 fortnightly**

**PART I. Now Ready. Of all Newsagents and Bookstalls**

Full particulars will be sent post free by the Publishers, and should any difficulty in obtaining the work be experienced, please write direct—

**SIR ISAAC PITMAN & SONS, LTD.,** Parker St., Kingsway, **LONDON**

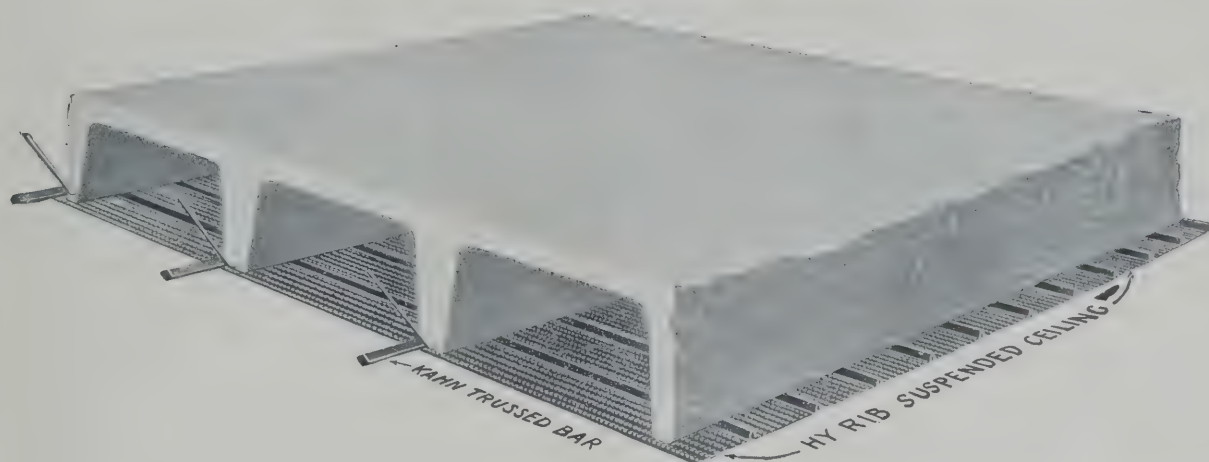
# ROYAL INSTITUTE OF BRITISH ARCHITECTS PUBLICATIONS

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS 3rd Series, published fortnightly during Session, and monthly in the recess. Exceptionally illustrated numbers, 2s. 6d.; ordinary issues	s.	d.
Annual volumes (paper covers) .. .. .	30	0
Ditto, buckram bound .. .. .	37	6
Buckram cases for binding .. .. .	4	0
TRANSACTIONS OF THE TOWN PLANNING CONFERENCE, OCTOBER, 1910 .. .. .	net	21 0
ARCHITECTS' CERTIFICATES: FORM PREPARED BY THE PRACTICE STANDING COMMITTEE. <i>Copyright.</i> Books of 100 Certificates, postage 9d. extra .. .. .	8	6
COTTAGE DESIGNS awarded Premiums in the Competitions conducted by the R.I.B.A. with the concurrence of the Local Government Board .. .. .	net	11 3
REPORT ON THE EDUCATION OF THE ARCHITECT IN THE UNITED STATES OF AMERICA, by ROBERT ATKINSON [F.] .. .. .	3	6
COMPOSITION AND STRENGTH OF MORTARS, by W. J. DIBDIN .. .. .	net	7 6
REPORT ON BRICKWORK TEST CONDUCTED BY A SUB-COMMITTEE OF THE SCIENCE STANDING COMMITTEE R.I.B.A. .. .. .	net	6 0
DILAPIDATIONS: HANDBOOK BY THE PRACTICE STANDING COMMITTEE R.I.B.A. .. .. .	net	3 9
SECOND REPORT OF THE JOINT COMMITTEE ON REINFORCED CONCRETE .. .. .	net	4 0
NOTES ON THE PROPERTIES AND INGREDIENTS OF COMMERCIAL PAINTS. Compiled by the SCIENCE STANDING COMMITTEE R.I.B.A. .. .. .	0	9
REPORT OF THE LIGHTNING RESEARCH COMMITTEE: with Preface by SIR OLIVER LODGE .. .. .	1	6
MEMBERSHIP OF THE R.I.B.A. Particulars of the Qualifications for Associateship .. .. .	1	0
PAMPHLET COMPRISING QUESTIONS SET AT RECENT EXAMINATIONS .. .. .	1	6
PAMPHLET COMPRISING QUESTIONS SET AT TOWN PLANNING EXAMINATIONS .. .. .	0	6
LIST OF BOOKS RECOMMENDED TO STUDENTS ( <i>free</i> ).		
OBSERVATIONS ON "VITRUVII DE ARCHITECTURA LIBRI DECIM." By J. L. USSING, Ph.D., LL.D. .. .. .	2	6
DRY-ROT IN TIMBER .. .. .	0	2
FORMS OF AGREEMENT AND SCHEDULE OF CONDITIONS FOR BUILDING CONTRACTS, 1909 <i>Copyright</i> .. .. .	1	6
MODEL FORMS (1920), ditto .. .. .	1	6
NOTICE FORMS, for use under Part VIII of the London Building Act: Form A.—Party Structures (ss. 82-92) .. .. .	0	4½
Form B.—Intention to build within ten feet of, and at a lower level than, adjoining Owner's Building (s. 93) .. .. .	0	4½
Form C.—External Walls with Footings projecting into Adjoining Owner's Premises (s. 87) .. .. .	0	4½
Form D.—Party walls on Line of Junction of Adjoining Lands (s. 87) .. .. .	0	4½
Form E.—Appointment of Third Surveyor (s. 91) .. .. .	0	4½
SCHEDULE OF PROFESSIONAL PRACTICE AS TO CHARGES .. .. .	0	9
SCALE OF ARCHITECTS' CHARGES FOR HOUSING WORK .. .. .	0	4
REGULATIONS FOR ARCHITECTURAL COMPETITIONS ( <i>free</i> ).		
FORMS OF ARTICLES OF PUPILAGE .. .. . <i>Copyright</i>	1	6
CONSERVATION OF ANCIENT MONUMENTS: General Advice, &c. .. .. .	0	9
HINTS TO WORKMEN ENGAGED ON REPAIRS AND RESTORATION, ETC. .. .. .	0	9
PRIZES AND STUDENTSHIPS (pamphlet) .. .. .	1	0
LOAN LIBRARY CATALOGUE (Revised up to 31st Dec. 1923) .. .. .	1	6
LIBRARY CATALOGUE AND SUPPLEMENT (1834-1898 Complete) .. .. .	10	6
THE DESIGNERS OF OUR BUILDINGS. By L. COPE CORNFORD, with a Foreword by WILLIAM J. LOCKE .. .. .	5	0
ALBUM OF PORTRAITS OF PAST PRESIDENTS 1835-1908: Photogravure Reproductions of Paintings in the possession of the Institute. Half morocco .. .. .	63	0

*Application for copies of the above publications should be addressed to*  
9 CONDUIT STREET, LONDON, W.1



# THE TRUSCON FLOOR in Reinforced Concrete



## BEFORE PLACING YOUR FLOORING CONTRACTS CONSIDER THE FOLLOWING ADVANTAGES OFFERED BY THE TRUSCON FLOOR:

Great rapidity in construction and saving in cost.

Exceptional strength and rigidity. It is sound-proof and fire-proof.

Long span flat ceilings are obtained without secondary beams.

It is the lightest floor obtainable.

It can efficiently accommodate within its hollow spaces all the "domestic services."

It is particularly suitable for use in conjunction with the new system of "Panel" heating.

It can be constructed by the builder's own workmen and requires only the minimum of skilled labour.

*The Truscon Floor Book containing illustrations and detailed information will be forwarded on application.*

## The TRUSSED CONCRETE STEEL Co., Ltd.

*Reinforced Concrete Engineers,*

22 CRANLEY GARDENS, SOUTH KENSINGTON, S.W.7.

Used by H.M. Office of Works, Duchy of Cornwall, Isles of Scilly Estates, Railway Companies, Public Institutions, etc.

J. H. RATCLIFFE'S

## "GLUTENGLASS"

**A Guaranteed Waterproofing.**

Colourless, easy working, and a fluid with enormous covering power, GUARANTEED to prevent damp from striking THROUGH Wallpaper, Paint, Distemper, etc.

### Water Petrifies "GLUTENGLASS"

One gallon covers on a plaster wall 158 square yards first coat, can be second coated in 15 minutes and Papered, Painted, Distempered, etc., 30 minutes afterwards, in a normal atmosphere. "GLUTENGLASS" will not crack, blister, shell or peel, it drives right into the plaster, wallpaper sticks on "GLUTENGLASS" and does not open at the joints. It is as easy in application as "Styptic," two coats are a cure on WET Walls.

**Send for a Sample and try this extreme test.**

Apply two coats on a piece of newspaper allowing final coat to dry thoroughly, then pour some water on and renew every few days as the water will evaporate, do this for a month, then you will find "Glutenglass" not affected

Packed as follows:—

1 gallon tins	-	24/-	per gallon
"	-	26/-	"
"	-	28/-	"

TINS AND CASES FREE.

J. H. RATCLIFFE'S

## "STYPTIC"

Is a TRANSPARENT Fluid to prevent Knots, Sappy Wood, Bleeding Colours, TAR, Creosote, Dr. Angus Smith's Solution, Greasy Walls, Indelible Ink, Oil, Coffee Stains, Salt in Plaster, Oil smoked Ceilings, and Smoke Cracks, etc., striking through the succeeding coats of Paint, Distemper or Wallpaper.

Recommended by Messrs. MAJOR & Co., Ltd., Hull, if it required to paint on "Solignum" without affecting the unique preservative properties of "Solignum."

"STYPTIC" saves a coat of Paint on bare wood, hardens off in a few minutes, and no sap can get through.

One gallon of "STYPTIC" covers 140 super yards on bare white deal wood, this is 40 super yards further than one gallon Knotting.

Price in 1 gallon tins	-	22/-	per gallon
"	-	23/-	"
"	-	24/-	"

TINS AND CASES FREE.

**SOLD BY MOST LEADING DECORATORS' MERCHANTS.**

**J. H. RATCLIFFE, Stanley Street, SOUTHPORT.**

# ARCHITECTS SHOULD NOTE

that the ORIGINAL 20-inch "INTEROVEN" (Pascall's Patent) CONVERTIBLE COOKING and HEATING STOVE has now been reduced in price from £9 to

**£8 : 5 : 0** subject to Trade Discount

(Hot Closet under Stove and Boiler extra)

**Including Improved Flue Cleaning without removal of Oven.**

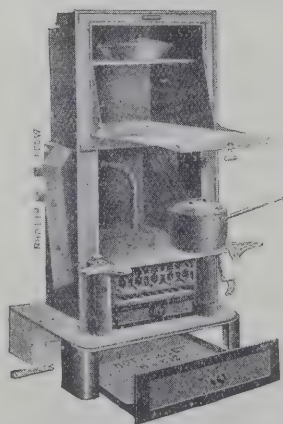
VERY LOW PRICES QUOTED FOR HOUSING SCHEMES

PERFECTLY EFFICIENT COOKING GUARANTEED

CAN BE FITTED IN OPENINGS 20 in. wide by 14 in. deep

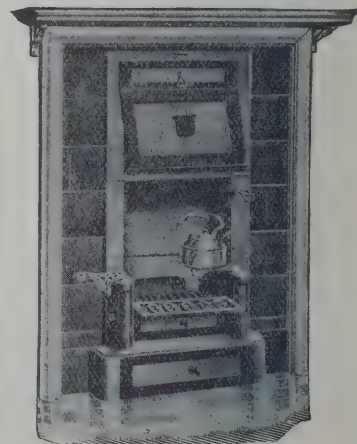
BOILER CAN BE DISCONNECTED WITHOUT UNSETTING OR UNSCREWING ANY PART OF STOVE

Write for Illustrated List and Particulars of the NEW 24 in. & 35 in. "SUPER INTEROVENS."



The 20-inch "INTEROVEN" (unfitted) Standing on Hot Closet or Under-oven. Oven open, hot plate lowered, showing boiler connections and revolving trivets.

Size .. .. 20 x 44 x 14 in. deep  
(If without Hot Closet, 38 in. high.)  
Oven .. .. 15 x 13½ x 12 in. high



"INTEROVEN" standing on Hot Closet or Under-oven which warms plates and bakes. Mantel No. 11.

OVER 70,000 IN USE.

**THE INTEROVEN STOVE Co., Ltd. (Dept. 95), 156 Charing Cross Road, London, W.C.2**

(Also makers of the "BEWTY" Expanding Barless Fire-Fronts for modernising Sitting and Bed-room Grates.)



# G. W. HARRISON & CO.

NAPIER LEAD WORKS, LAISTERDYKE, BRADFORD.

Makers of the "SILENT HARRIAP" Flushing Cistern.

A little touch which can add distinction to a house, whether a Palace or a Cottage, which an Architect can introduce without extra cost.

Apart from the advantage of noiselessness, the "SILENT HARRIAP" Water-Waste Preventing Flushing Cistern excels all others in the essential points which contribute to the production of a perfect Cistern.

Its superiority is demonstrated by the fact that it has been awarded Medals each successive year since 1921 by the Royal Sanitary Institute at their Exhibitions.

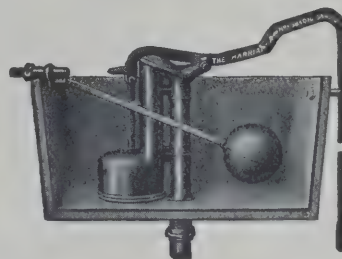
## THE "SILENT HARRIAP"

is made of non-corrodible metal and copper, and is indestructible. It cannot get out of order, or fail to act. It has no brass pipe to open or corrode by the action of electrolysis.

It has a light pull, and very rapid flush, and can be bought at a competitive price.

Owing to these qualities it is specially suitable for Housing Schemes and Conversions, for which many thousands have been supplied with great satisfaction.

We shall be pleased to send quotations for Cisterns only, or for complete W.C. sets.



THE PATENT "SILENT HARRIAP" CISTERN.

# HOLLOWAY BROTHERS

(LONDON), LTD.

Contractors for

## Building and Engineering Works

Stonework of all kinds and High-Class Joinery a Speciality

CONTRACTORS for all kinds of

## FERRO-CONCRETE CONSTRUCTION

### HEAD OFFICE :

BRIDGE WHARF,

GROSVENOR ROAD,

WESTMINSTER, S.W.

Telephone  
Victoria

8560-1-2

### JOINERY WORKS :

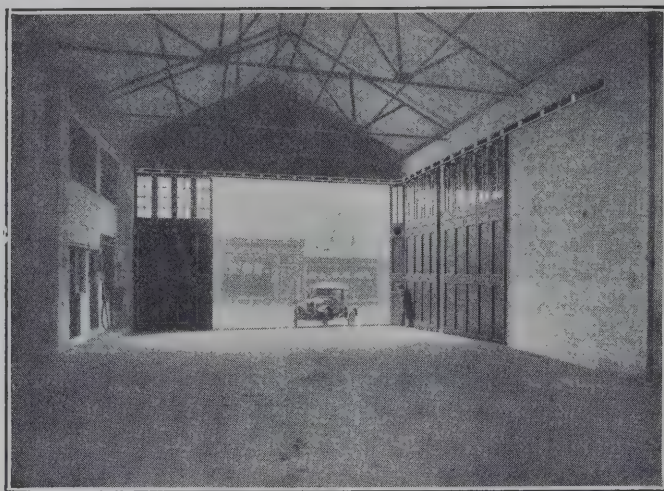
MAGDALEN ROAD,

EARLSFIELD, S.W.

### STONE MASONRY WORKS :

NEW ROAD, BATTERSEA, S.W.

# HENDERSON SYSTEM SLIDING DOOR GEAR



*"Tangent Senior" Door Gear—Heavy Type for High Doors.*

**THE  
HENDERSON SYSTEM  
SLIDING DOOR GEAR.**



BRITISH MADE

It is significant that the Henderson System is repeatedly specified by practically all Government Departments, by the majority of Corporations and local Authorities, by Colonial and Foreign Governments, by the Railway Companies, by the Architectural Profession and by leading firms and Constructional Engineers throughout the United Kingdom. It has been incorporated on some of the finest buildings in the land and can be seen at work in every great city.

We claim that for "Quality" Gear the sale of the Henderson System considerably exceeds that of all other systems put together.

**P. C. HENDERSON LTD., BARKING**

**THE  
HENDERSON SYSTEM  
SLIDING DOOR GEAR.**



BRITISH MADE

The **KLEINE** Patent

FIRE RESISTING FLOORS, ROOFS, ETC.,  
of

**REINFORCED HOLLOW BRICKS**

constructed with or without centering.

*Established 1905.*

Over 1½ million square yards in use in the United Kingdom.

**THE KLEINE PATENT FIRE RESISTING FLOORING SYNDICATE, LTD.**

Offices—133/136, High Holborn, LONDON, W.C. 1.

Telephone: 5328 MUSEUM



# HOBBS, HART & CO., LTD.

## LOCKS FOR ALL PURPOSES.

Makers of "ALL BENT CORNER" SAFES to meet all degrees of security.

## STRONG ROOM DOORS.

Patent Coned Ventilators for Strong Rooms.

Showrooms

General Office and Works

76, CHEAPSIDE, LONDON, E.C.2.

ARLINGTON STREET, ISLINGTON, LONDON, N.1

# SIRAPITE PLASTER

(FOR WALLS & CEILINGS).

As supplied to H.M. Government

This popular plaster is made in England by British workmen, and always has been. Sales have far exceeded half-a-million tons. Has been on the market about 35 years.

Directions for using, kindly apply to the Sole Manufacturers:—

**THE GYPSUM MINES** { MOUNTFIELD,  
ROBERTSBIDGE  
SUSSEX.

LIMITED.

And KINGSTON-ON-SOAR.

# "TRANQUIL"



## PATENT SILENT COMBINATION CLOSET

This Closet Suite gives a powerful SILENT flush, through a 2½ in. outlet, and is just the right type of W.C. for Bungalows, Villas, Hotels, etc., where quietness is very essential.

Mansion pattern £14  
Bungalow pattern £12  
Height of Suite, 3ft. 9in.

This closet is a perfect water-waste preventer and passes all the LEADING WATER WORKS.

**THE VALVELESS  
SYPHON CO.**  
Kirkstall, Leeds  
MAKERS OF NEPTUNE  
AND WATERWITCH  
CISTERNS.

Telegrams  
SYPHON CO.,  
KIRKSTALL.

Telephone  
216 HEADINGLEY.

# WEST LONDON TIMBER & MOULDING CO. LTD.

TIMBER MERCHANTS & MANUFACTURERS

of all kinds of

Telephone No.  
CHISWICK  
1737  
(2 lines).

# MOULDINGS

Telegrams  
UPRIGHTLY  
CHISK,  
LONDON.

ARCHITECTS' OWN DESIGNS A SPECIAL FEATURE.

MAGNOLIA HOUSE, STRAND-ON-THE-GREEN, CHISWICK, W.4.



## Architectural Styles

### *French Renaissance*

## AZAY LE RIDEAU TOURAIN

AZAY le Rideau is the purest French Renaissance. Built by Gilles Berthelot, early in the reign of Francois I, it is adorned with scriptures by Jean Goujon with the stateliest effect. The entrance portico, over which is the salamander of Francois, has a strong, sculptured arcade and arched window openings and niches filled with bas-reliefs. Everywhere there is a rich, though not gross, display of ornament, beginning with such constructive details as the pointed-roof *tourelles* and carven chimneys, which are themselves exceedingly decorative.

The soberness of the main lines, the harmony of the empty spaces and those that are decorated, together with the delicacy of all the details, make it the most perfect example of its style in France.

# JOHN LAING & SON, LTD

## BUILDING & ENGINEERING CONTRACTORS

MILL HILL, N.W.7,  
296, HIGH HOLBORN, W.C.1,  
DALSTON ROAD, CARLISLE.

Established 1874

TELEPHONES: MILL HILL, 1574  
HOLBORN, 6086  
CARLISLE, 182

Series G No. 6





















UNIVERSITY OF ILLINOIS-URBANA



3 0112 096620353